# CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, June 15, 1911.

## CONTENTS.

CONSTRUCTION NEWS:
Railways .......... 281
Electric Railways .......... 281
Light and Power Plants .......... 281
Bridges .......... 282
Buildings .......... 293
Water Supply and Irrigation .......... 284
Sewerage .......... 285
Garbage Disposal .......... 286
Streets and Roads .......... 286
Manufacturing Plants .......... 288
Miscellaneous Contracts .......... 289
U. S. Possessions and Cuba .......... 291
Foreign Contracts .......... 292
Contract Prices .......... 290
Plans and Specifications on File .......... 291
List of Contracts Pending .......... 291
EXAMINATIONS .......... 292
PROPOSALS .......... 292

## RAILWAYS.

*(*Denotes that this work is advertised in Engineering News.)*

✚PENNSYLVANIA.—Conewago & Southern R. R.—This new company proposes to construct an 8-mile railroad from a connection with the Philadelphia & Reading Ry. near Biglerville to Cashtown. The contract for building the line has been awarded to S. S. JOHNSON, Millerstown. H. M. Hamblin, 1813 Green St., Harrisburg, is Pres. and Daniel M. Sheeley, Cashtown, is Treas.

WEST VIRGINIA.—Richwood & Gauley R. R. Co.—This company has been chartered to build a line along Cherry River, in West Virginia, in Nicholas County, to open up coal and timber lands. Connections will be made with existing lines at the junction of the Cherry and Gauley Rivers. The incorporators are Charles S. Weston, James M. Oakford, Walter Briggs and Fred L. Space, of Scranton, Pa., and Henry W. Armstrong, of Richwood, W. Va.

✚ALABAMA.—Alabama Central R. R.—The contract for an 8-mile extension from Manchester, Ala., has been awarded to W. E. HALL, Birmingham.

Birmingham & Vicksburg R. R.—A new line is to start from Vicksburg, passing through Flora, Canton, Carthage, Edenburg and Shuqualak, Miss., direct to Tuscaloosa, from whence the road will run into Birmingham, or traffic arrangements will be made with some other line by which trains may run directly into this city. Announcement has been made that all papers for the finances had been signed in the American Consulate at Paris, and that nothing in a legal or financial way remained to interfere with the immediate construction. C. Searles, Vicksburg, Miss., is Pres. and I. Gross, Canton, Miss., is Vice-Pres.

Surveys are being made for a new railroad which will connect Pascagoula Bay with Birmingham and may, eventually, be extended north. The first section will be from Demopolis to Linden. Woolsey Finnell, Masonic Temple, Tuscaloosa, Ala., is Ch. Engr.

TENNESSEE.—Louisville & Nashville R. R.—The following statement has been made by John Howe Peyton, assistant to Milton H. Smith, President of the road:

"The Lewisburg & Northern R. R. Co. was chartered in June, 1910, to build a railroad across the State of Tennessee, from Portland, near the Kentucky-Tennessee State line, southwardly to the Alabama-Tennessee State line.

"Surveys have been completed and a line adopted from a connection with the Louisville & Nashville R. R. near Maplewood, just north of Nashville, across the State to the Alabama State line. The adopted route crosses Davidson, Williamson, Marshall, Rutherford, Giles and Lincoln Counties.

"The new railroad which will penetrate the heart of this magnificent territory, will be built with double track throughout. The maximum rate of grade will be so low that the line may be said to be practically level. The curvature will be very light. All subgrade structures will be of steel and masonry. Heavy rail will be laid, and the tracks thoroughly ballasted throughout.

"The Lewisburg & Northern R. R. will connect at the Alabama State line with a new double-track railroad, which will be built from that point to Athens, Ala., under the charter of the Nashville & Decatur R. R. Co.

"At Athens connection is made with the Nashville & Decatur division of the Louisville & Nashville R. R.

"From Athens, Ala., southward to the freight yards at Boyles, Ala., in the outskirts of Birmingham, the grades of the Louisville & Nashville R. R. will be reduced, much curvature eliminated and a second track added. Nearly all the right of way required for the portion of the proposed double-track railroad within the State of Alabama has also been secured.

"The construction of these several reaches of new railroad will give the Louisville & Nashville system 208 miles of new, low-grade, double-track line and a continuous double-track line from the junction between the Henderson division and main stem at Amqui, Tenn., ten miles north of Nashville, to Calera, Ala., 34 miles south of Birmingham, a total of 252 miles."

✚KANSAS.—Atchison, Topeka & Santa Fe R. R.—The contract to extend the Denver, Enid & Gulf division to Kiowa has been awarded to the JOHNSTON CONSTRUCTION CO., Amarillo, Tex.

ARKANSAS.—Rock Island System, Malvern & Camden R. R. Co.—This company has been organized to build a road 60 miles long from Malvern, Ark., via Hot Springs, to Camden, Ark. The preliminary surveys for the line have already been made. The new line is a Rock Island proposition, although the company bears a separate name. The Rock Island now extends to Malvern and the additional 60 miles will give the Rock Island system access to a valuable timber and agricultural section. Thomas S. Buzbee, Malvern, Ark., is Pres.

TEXAS.—Kansas City, Mexico & Orient Ry.—Announcement has been made that $3,000,000 has been raised to complete the 225 miles of road between San Angelo and Alpine, Tex. Track has been laid between San Angelo and Mertzon, 30 miles. The road now has 540 miles of track in operation between Wichita, Kan., and Mertzon, Tex. A little more than 100 miles will then need be built to put the line through from Wichita to Topolobampo on the Mexican Pacific coast. Between Wichita and Kansas City this company has trackage arrangements with the Missouri Pacific, although the line between Wichita and Emporia has been graded. W. W. Colpitla, Kansas City, Mo., is Ch. Engr.

St. Louis & San Francisco R. R.—The construction of a 27-mile extension of the Fort Worth & Rio Grande division from Brady to Mason is under consideration. It is possible that the road may later be extended to Waring. F. G. Jonas, St. Louis, Mo., is Ch. Engr. of Construction.

OKLAHOMA.—Missouri, Kansas & Texas Ry.—This company contemplates the construction of an extension from Bartlesville directly west across Oklahoma through Pawhuska and Fairfax to the extreme northwestern portion of the State. Recently the citizens of Pawhuska asked the M., K. & T. to change the main line south through Oklahoma so it would touch that city, but instead, the Katy is contemplating the westward extension. It is said the company will make use of the abandoned Osage & Western, which was partially graded last year east from Billings toward Fairfax. S. B. Fisher, St. Louis, Mo., is Ch. Engr.

ONTARIO.—Bruce, Mines & Algoma R. R.—This road has been purchased by Geo. P. McCallum and H. Appleton, of Sault Ste. Marie, Ont., and plans have been completed for the extension of the road for a total distance of 350 miles, intersecting the "Soo" lines and main line of the Canadian Pacific and the Canadian Northern and forming a junction with the Grand Trunk Pacific 100 miles west of Cochrane. Active construction work will commence about Aug. 1.

## ELECTRIC RAILWAYS.

*(✚Denotes a contract awarded.)*

LEWISTON, ME.—The Lewiston, Augusta & Waterville Ry. Co. is considering a plan to build a 12-mile extension from Bath to Popham Beach. H. B. Ivers, Lewiston, is Gen. Mgr.

SYRACUSE, N. Y.—The Syracuse, Watertown & St. Lawrence River R. R. Co. has applied to the Public Service Commission for a certificate of convenience and necessity and for authority to exercise franchises granted to it. The company, recently organized, plans to build a 6-mile railroad from a connection with the Syracuse & South Bay St. Ry. Co., at or near Stop No. 9, in the town of Cicero to Brewerton. The estimated cost is $300,000.

PERKASIE, PA.—The Lehigh Valley Traction Co. is planning to reconstruct its line from a point north of Perkasie to a point south of Sellersville, which will shorten the line about five miles.

MEADVILLE, PA.—The Meadville & Cambridge Springs St. Ry. Co. has been purchased by the Northwestern Pennsylvania Ry. Co. The entire system will be rebuilt. The offices of the Meadville & Cambridge Springs line at Meadville will be discontinued.

MOUNT MORRIS, PA.—A trolley line is projected to connect Mount Morris and Maidsville, W. Va. W. K. Hatfield, Thomas Keenan, John Long, Rufus Lazzelle and P. Bowley are reported incorporators. The cost is estimated at $100,000.

✚FRIENDLY, W. VA.—Press reports state that the Parkersburg & Ohio Valley Electric R. R. Co. has awarded a contract to complete the five miles of railway between Friendly and Sistersville to JOHN SHRADER at $12,601. C. L. Williams, Parkersburg, is Receiver.

KEYSER, W. VA.—The Twin Mountain & Potomac R. R. Co. proposes to build a line from Keyser to the Twin Mountain Orchards, Hardy County, W. Va., about 22 miles. Surveys are being made by J. Clyde Lewis, Engr., Grafton, W. Va. E. A. Russell, Fairmont, W. Va., is Secy.

FAYETTEVILLE, N. C.—The Fayetteville Street Ry. & Power Co. has been granted a franchise to extend its tracks on Hay St.

COLUMBIA, S. C.—The Columbia Electric St. Ry., Light & Power Co. is planning to increase its capital for the purpose of extending its system. William Shannon, 1226 Washington St., Columbia, is Ch. Engr.

WAYCROSS, GA.—The Waycross Gas, Electric & Ry. Co. has been granted a franchise to build its tracks over certain streets in Waycross.

GRETNA, LA.—A. Marrero has received a 50-year franchise to build a railway between Gretna and Waggaman. A company to build and operate this proposed line will be formed at once.

✚BYESVILLE, OHIO.—The Midland Power & Traction Co., Cambridge, Ohio, has awarded a contract to GEORGE MOREHEAD, Senecaville, Ohio, to build an extension from Byesville to Pleasant City.

LAPORTE, IND.—Articles of incorporation have been filed by the Indianapolis & Chicago Ry., for the purpose of building an interurban line between Chicago and Indianapolis. The present plan is to run a line from Indianapolis to Sheridan, thence to Flora, Monticello, Francesville, Valparaiso, Hobart, Wheeler, Gary and Hammond and into Chicago. John C. Billheimer, Laporte, Ind., is interested.

BATTLE CREEK, MICH.—The Battle Creek, Coldwater & Southern Ry. Co. is negotiating for the sale of $120,000 of bonds for the construction of its 28-mile electric railway to connect Battle Creek and Coldwater. An office has been opened in Coldwater. F. Warren is in charge.

SPRINGFIELD, ILL.—The Wabash, Chester & Western R. R., extending from Chester, Ill., to Mount Vernon, a distance of 64 miles, has been purchased by the Southern Illinois Traction Co., which recently acquired a franchise to use the upper deck of the free bridge and several streets in the business section of St. Louis. H. D. Mepham, promoter of the Southern Illinois Traction Co., announced that the Wabash, Chester & Western R. R. line will be converted into an electric line, and used as a part of an interurban system in southern Illinois. A line from the east end of the East Side free bridge approach to Pinckneyville, Ill., to connect with the Wabash, Chester & Western R. R.

CHICAGO, ILL.—The Chicago & Joliet R. R. Co. has been incorporated to build a railway from Chicago to Joliet. The main offices are at Chicago. The incorporators are: J. R. Blackhall, of Joliet; H. K. Crafts, George M. Stevens, William E. Stevens, Clayton E. Crafts, of Chicago, and others.

✚GODFREY, ILL.—The Alton, Jacksonville & Peoria Ry. Co. has awarded a contract for an extension from Godfrey to Jerseyville to GROMMETT & JOHNSON.

WAUKEGAN, ILL.—The Northern Illinois Industrial Co. has been incorporated and will build a railway from North Chicago to Waukegan. The offices are at Waukegan. The Directors are: C. E. Sayler, S. Schwartz, J. P. Arthur, Theo. H. Durst, Waukegan, and others.

WAUSAU, WIS.—The Wausau St. R. R. Co. contemplates making improvements, principally double-tracking. J. C. Justesen, 209 Third St., Wausau, is Supt.

CRESTON, IOWA.—The Creston Winterset Interurban Ry. Co. will probably begin in the near future to build a 60-mile electric railway to connect Spaulding, Macksburg, Winterset and Des Moines. The company intends to first build from Creston to Macksburg. The motive power will be steam for freight and gasoline motor cars for passenger service. The repair shops will be located at Creston. Capital stock authorized, $500,000. Officers: R. Brown, Creston, Pres.; Clarence Wilson, Macksburg, Vice-Pres.; A. S. Lyon, Orient, Secretary; W. W. Walker, Macksburg, Treas., and C. B. Judd, Clarinda, Ch. Engr.

DULUTH, MINN.—The Duluth & Northern Traction Co. has applied for a charter to build a 1½-mile electric railway in this city. The incorporators are: Charles P. Craig, J. G. Williams, A. M. Marshall, Chester A. Congdon and others.

BROWNSVILLE, TEX.—The City Council has ordered the Brownsville & Gulf Ry. Co. to remove its tracks which extend for a mile through the heart of the town. The company recently applied to the Council for a franchise to operate a motor car service over the track and this was refused. The City Council is inviting applications for a franchise for an electric street railway system, to cover the principal streets.

EBENEZER, TEX.—The Alamo Land & Sugar Co. will construct a system of interurban railways 16 miles long to run from Ebenezer to various points upon its tract of 32,000 acres of land near here. The construction of the railway system will soon be started, according to the announcement of C. D. Hellen of Des Moines, Iowa, one of the chief stockholders of the company. In the beginning gasoline motor cars will be used but later on electric transit will be substituted.

✚HOUSTON, TEX.—The Stone-Webster Engineering Corporation, Boston, Mass., which is constructing the interurban electric railway between Houston and Galveston, 51 miles, has awarded a preliminary contract for the combination machine shops and car-sheds that are to be located here. This contract is for grading the site of the proposed building and has been awarded to HARTY & FORD, Houston. The machine shops and car-sheds to be erected here will be duplicated at Galveston.

McKINNEY, TEX.—The Commercial Club is promoting the construction of an interurban electric railway between this city and Bonham, about 36 miles.

✚DENVER, COLO.—The Colorado Interurban Co. has awarded the contract to the INTERURBAN CONSTRUCTION CO., Denver, for the construction and equipment of its 71-mile railway. Construction will begin as soon as a pending financial deal is completed. The line will connect Denver, Ft. Lupton, Ft. Collins, Peatsville, La Salle, Evans, Fristown, Frederick and Longmont. Bonds of $6,000,000 have been authorized. Eben N. Reaser, Vice-Pres. Noted May 25.

THEODORE, UTAH.—Plans and specifications are being prepared by the Westinghouse Electric & Mfg. Co., Pittsburg, Pa., for the construction and equipment of a line connecting Theodore, Colton, Myton and Roosevelt, about 80 miles.

CANBY, ORE.—The Willamette & Molalla Valley Ry. Co. will probably let contract in July for a 12-mile railway through Motalla Valley to Canby for which surveys have been made. W. J. Lee, Canby, is Gen. Mgr. Noted April 20.

WATSONVILLE, CAL.—Contracts will soon be awarded by the Watsonville Ry. & Navigation Co. for the construction of an extension from Watsonville to Rowes Corners, thence to Corralitos and along the Santa Cruz road, returning to Watsonville. Another line is to be built along San Juan Road, Driscoll's Lane and Salsipuedes Road, to a connection with the main line at Rowes Corners, and a branch may also be built to Pajaro and the Werner district. Concrete docks will be built at Port Watsonville. F. E. Snowden, 311 California St., San Francisco, is Pres.

✚GUELPH, ONT.—The Peoples Ry. Co., Berlin, has awarded a contract to the ACME CONSTRUCTION CO., Toronto, for the construction of a line from Guelph to London.

## LIGHT AND POWER PLANTS.

*(*Denotes that this work is advertised in Engineering News.)*

✚BOSTON, MASS.—The contract for steam fitting in power house and tunnels at the City Hospital has been awarded to BRADLEE & CHATMAN, at $12,543. Other bids were: Lynch & Woodward, $14,362; Ingalls & Kendricken, $14,500; W. W. Campbell & Son, $15,732. A. Schuman is Chn. Hospital Trustees.

✚BOSTON, MASS.—A contract has been awarded by the Edison Co. to GEORGE B. H. MACOMBER for a 1-story, 65 × 40-ft. brick electric substation to cost $35,000.

✚BOSTON, MASS.—A contract for generator, switch board and wiring at the City Hospital has been awarded to the LORD ELECTRIC Co. at $10,750. Other bids were: Hixon Electric Co., $10,992; Edwin C. Lewis Co., Inc., $11,269; M. B. Foster Co., $12,163; Barnes-Pope Electric Co., $13,126. A. Shuman is Chn. Hospital Trustees.

HARTFORD, CONN.—The Connecticut Co. has secured a permit to erect two high tension towers on the east side of Commerce St.

LONG ISLAND CITY, L. I., N. Y.—The Public Service Commission, Second District, has granted authority to the Long Island Lighting Co., recently organized, to issue bonds to the amount of $6,000,000 for the purchase of the following companies: The Northport Electric Light Co., the Amityville Electric Light Co., the Sayville Electric Co., and the Islip Electric Light Co.; for new construction from Northport to Commack, Commack to Islip, Islip to Sayville and Islip to Babylon; for a low-tension line from Brentwood to Central Islip and from Sayville to Ronkonkoma; for general improvements in apparatus and overhead construction throughout the entire territory.

BUFFALO, N. Y.—The Agricultural Chemical Co., it is stated, will erect a storage and power house at Lewis and Lyman Sts. The cost is estimated at $50,000.

✚NEW YORK, N. Y.—A contract for reconstruction of electric light system at Gouverneur Hospital has been awarded to the ANDERSON-MARTIN ELECTRIC CO., 1 Madison Ave., at $6,320.

INDUSTRY, N. Y.—Bids will be received by John F. White, Acting Pres. Bd. of Mgrs., State Industrial School, Industry, N. Y., until 7 p. m., June 20, for inside wiring and fixtures at that institution. F. B. Ware is State Arch.

✚ALBANY, N. Y.—The contract for installing the heating apparatus in the new addition to be erected at Public School No. 17, has been awarded to JAMES HUNTER HEATING & CONTRACTING CO., Albany, at $6,400.

RUTHERFORD, N. J.—Bids will be received by C. P. Perham, District Clk., Bd. of Education, Park School House, Rutherford, until 8 p. m., June 10, for the installation of heating systems and appliances complete for two 6-room school buildings, one at Wood St. and Washington Ave., and the other at Montrose and Vreeland Aves. Bids may be for one or for both buildings. Plans and specifications may be seen at the Park Ave. school, and at the offices of the architects, Taylor & Mosley, 40 Wall St., New York, N. Y.

✚PATTERSON, N. J.—The North Jersey Construction Co. has awarded a contract for two quadruple equipments of No. 306 interpole railway motors with type HL (non-automatic) unit switch control, to the WESTINGHOUSE ELECTRICAL & MFG. CO., East Pittsburg, Pa.

PITTSBURG, PA.—The Washington Electric Power Co., Pennsylvania, a new corporation, will on July 1 take over the electric power plant for lighting and other purposes in Washington, Pa., Canonsburg, McDonald, Oakdale and Waynesburg. Transmission lines from Washington to other points will be built. The amount involved in the organization is $1,200,000.

PHILADELPHIA, PA.—Bids will be received at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., on July 15, for a conduit and wiring system, lighting fixtures, etc., in the United States Appraisers' Stores at Philadelphia. Drawings and specifications may be had at the office of the custodian at Philadelphia, Pa., or at the office of the Supervising Architect.

BALTIMORE, MD.—The Gas & Electric Co. will build an addition to its gas plant at the foot of Leadenhall St., at a cost of $100,000. The FIDELITY CONSTRUCTION CO. has been awarded the contract for the concrete foundation. The addition will be of brick and stone. Two gas generating apparatus will be installed. Bids for other work will be asked as soon as the plans and specifications are finished.

WASHINGTON, D. C.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., until 2 p. m., June 30, for supplying and installing lighting fixtures in the U. S. buildings at Austin, Minn.; Beloit, Wis.; Clinton, Mo.; Decorah, Iowa; Fremont, Neb.; Kokomo, Ind.; Litchfield, Ill.; Plattsmouth, Neb., and Great Falls, Mont. Drawings and specifications may be obtained at the office of the Supervising Architect.

✚The contract for furnishing meters, excepting water meters, for the various navy yards, has been awarded to the GENERAL ELECTRIC CO., Schenectady, N. Y., at $37,550.

RICHMOND, VA.—The Appalachian Power Co. will probably call for bids for machinery within 90 days. Blackwell & Buck, 49 Wall St., New York, are the Engrs.

✚PARKERSBURG, W. VA.—The Parkersburg, Marietta & Interurban Ry. Co., Parkersburg, has awarded contract to the WESTINGHOUSE ELECTRIC & MFG. CO., East Pittsburg, Pa., for two quadruple equipments of No. 306 split frame, interpole motors with type K-35 control and a Westinghouse switch.

NEWBERRY, S. C.—The Southern Power Co. has applied for a franchise for a transmission line from Newberry to Greenwood. Surveys are being made.

LAFAYETTE, LA.—The municipal electric light system will be changed from alternating to direct current, at a cost of about $40,000.

✚CINCINNATI, OHIO.—The Cincinnati Traction Co. has awarded a contract to the WESTINGHOUSE ELECTRICAL & MFG. CO., East Pittsburg, Pa., for a quadruple equipment of No. 303 railway motors with type H L (non-automatic) unit switch control.

DAYTON, OHIO.—The Dayton Power & Light Co. has increased its capital for the purpose of erecting electrical plants.

CALIFORNIA, OHIO.—Bids will be received at the office of the Director of Public Service, City Hall, Cincinnati, Ohio, until 12 m., on June 19, for furnishing and delivering and installing two 50-KW., 230-volt direct current generators in the head house of the filtration plant at California. Plans and specifications may be obtained at the office of the General Superintendent of the Water-Works, City Hall.

✚HILLSDALE, MICH.—The Board of Public Works has awarded a contract to the ALLIS-CHALMERS CO., Milwaukee, Wis., for a 300-KW. direct-connected steam turbine and a generator at $9,900.

✚IRON MOUNTAIN, MICH.—The general contract for construction of a concrete dam and power plant for the Peninsular Power Co., at Iron Mountain, has been awarded to the NEWTON ENGINEERING CO., Milwaukee, Wis. The power company was recently incorporated with a capital of $750,000. It is proposed to develop and transmit about 4,500 HP., made available by the proposed dam at Twin Falls of the Menominee River, a few miles above Iron Mountain.

✚MARQUETTE, MICH.—A contract for the construction of a dam on Dead River has been awarded to POWELL & MITCHELL, Marquette, at $57,000, and a contract for the Silver Lake dam to WAHLMAN & TREBILCOCK, Ishpeming, Mich., at $15,000.

GRAND HAVEN, MICH.—A valuation of the municipal water and gas plant will be made by the Riggs & Sherman Co., Toledo, Ohio.

✚ST. PAUL, MINN.—The contract for the power plant, heating, plumbing, and ventilating systems for the hospital for inebriates at Wilmar, Minn., was let June 9 by the State Board of Control to H. KELLY & CO., Minneapolis, Minn., at $28,200. C. H. Johnston is City Arch.

BISHOP, TEX.—The local electric light plant, owned by F. Z. Bishop, will be enlarged.

LULING, TEX.—The Luling Electric Light & Power Co. will enlarge and improve its plant.

GALVESTON, TEX.—The Gulf, Colorado & Santa Fe Ry. Co. will soon call for bids for the construction of a 16-stall brick low-type engine house, equipped with a new 85-ft. turntable, estimated to cost $46,000; a brick storehouse, with waterproof concrete basement, estimated to cost $17,000; brick machine shop and blacksmith shop combined, estimated to cost $9,500; brick power-house, estimated to cost $6,200; brick sand-house, estimated to cost $6,000. Other improvements including steel water tanks and necessary pipe lines in the Galveston yards will be made. Frank Merritt is Ch. Engr.

AUSTIN, TEX.—The Austin Gas Light Co. will erect a new generator house, with elevator, tower and engine. The cost of the improvement will be about $12,000.

COCHITI, N. MEX.—The application of L. A. Hughes and G. W. Prichard for use of the water of the Rio Grande at this place for operating a large hydroelectric plant has been approved by the territorial engineer, Charles D. Miller.

PORT ORCHARD, WASH.—Bids will be received until June 19 by the State Board of Control, Olympia, Wash., for a heating and lighting plant, to be built in connection with the new Veterans' Home. A conduit system to all buildings on the grounds will be installed. The estimated cost is $30,000.

TACOMA, WASH.—Bids were opened on June 6 by the Commissioner of Indian Affairs, Washington, D. C., for installing a steam heating and hot water service system in the Cushman School, Washington: A. Gehrl & Co., Tacoma, Wash., $6,987; Round-Hursen Co., Seattle, Wash., $10,480; M. A. Thompson Heating Co., Tacoma, Wash., $6,885 and $7,110, galvanized iron pipe to be used; B. Olson Co., Tacoma, Wash., $9,900.

CENTRALIA, WASH.—Preliminary arrangements are about completed by the Washington-Oregon Corporation, owners of the local street car, power and water service, for the installation of a power plant on the Kelama River. A pipe line of 60 miles will be built to Centralia and Chehalis. About $750,000 will be involved. The officers are: Isaac Anderson, Tacoma, Pres.; A. Welch, Gen. Mgr. The Directors are John W. Brock, Pres. of the Title & Trust Co., Philadelphia; C. A. Hellar, C. De Sinkler, of Sinkler Brothers, Philadelphia, and A. W. Hall, Portland.

CLARKSTON, WASH.—The Council passed an ordinance granting to the Clarkston Improvement Co. the right to construct an electric light and power system.

VANCOUVER, WASH.—Improvements are contemplated by the Washington-Oregon Corporation, controllers of the water and gas plants, to the extent of $400,000.

KLAMATH FALLS, ORE.—A franchise has been granted to the W. F. Boardman Co., San Francisco, to equip and operate a gas plant.

EL CENTRO, CAL.—The Imperial Valley Gas Co. contemplates extending its mains to Brawley, about 15 miles.

✚LONGBEACH, CAL.—The Southern California Edison Co. has awarded a contract to the SECURITY CONSTRUCTION CO., Citizens' National Bank Bldg., Los Angeles, for the construction of steel work for gallows frame and outgoing lines at their plant in Longbeach, at $5,580. A contract was also awarded to CHARLES C. MOORE CO., San Francisco, for installing piping equipment for oil section lines, modifying main piping and an autmoatic fuel oil regulating system, at $10,388.

LOS ANGELES, CAL.—Bids will be received at the Department of the Interior, U. S. Reclamation Service, Washington, D. C., until 2 p. m., June 23, for furnishing transformers for the U. S. Reclamation Service. For particulars address U. S. Reclamation Service, 605 Federal Building, Los Angeles, or Washington. F. H. Newell is Director.

SAN FRANCISCO, CAL.—Preliminary plans for a hydroelectric project to develop electric power for the Kern County Water Power Co. are being prepared by H. E. Stone, Engr., Pacific Bldg., San Francisco. The work will include a concrete dam.

VALLEJO, CAL.—Bids will be received by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., July 8, for auxiliary power plant equipment at the navy yard, Mare Island, Cal. Plans and specifications may be obtained at the Bureau.

FILLMORE, CAL.—The Ventura County Power Co. is planning to rebuild its transmission line.

✚LOS ANGELES, CAL.—The Southern California Edison Co. has awarded a contract to the SECURITY CONSTRUCTION CO., Citizens' National Bank Bldg., Los Angeles, for the construction of the steel work for gallows frame and outgoing lines at the plant in Long Beach, at $5,580, and to CHARLES C. MOORE CO., San Francisco, for installing piping equipment for oil section lines, modifying main piping for one Moore automatic fuel oil regulating system for about $10,388.

HAMILTON, ONT.—E. J. Sifton, Engr., has completed his report on the cost of a municipal power, lighting and distribution plant. The cost is estimated at $502,000, which provides for 8,000 electric standards, placed 100 ft. apart over the entire city, 200 commercial lighting customers and 1,000-HP. for power customers; 3,051-HP. will be required, and the rates for house lighting will be 4 8-10 cts. per K.W.-hour, as compared with 7.52 now paid to the Cataract Power Co. S. H. Kent is City Clk.

STETTLER, ALTA.—Bids will be received until 10 o'clock, July 3, for the following: One 125-KVA. generator exciter, and switchboard; one tandem compound steam engine, one 72-in. × 16-ft. boiler and stack, cedar poles and pole-line material, erection of pole-line. Specifications may be obtained at the offices of John Galt Engineering Co., 317 Portage Ave., Winnipeg. David Mitchell, Stettler, Alberta, is Town Comr.

## BRIDGES.

(✚*Denotes a contract awarded.*)

✚BOSTON, MASS.—The contract for rebuilding the fender piers at Neponset Bridge has been awarded to WM. H. ELLIS at $4,990. The other bids were: Lawler Bros., $5,388; W. S. Rendle & Son, $5,828; Geo. T. Rendle, $6,449; W. H. Keys & Co., $7,242.

LACKAWANNA, N. Y.—Bids were received by the Common Council for constructing a steel span across Smokes Creek at Hamburg Turnpike as follows: Frank L. Cohen, $18,050; Benjamin F. Speyer, $20,680; Fred C. Strack, $16,607; Corry Bridge & Supply Co., $19,025; A. B. Bellony, $20,448.

✚NEW YORK, N. Y.—Press reports state that the contract for 4,000 tons of fabricated steel for the tower and reinforcing of the Williamsburg Bridge has been awarded to the AMERICAN BRIDGE CO., 30 Church St., New York. The Snare & Triest Co., 142 Liberty St., are general contractors. Noted on June 8.

WHITE PLAINS, N. Y.—The Board of Supervisors has authorized a bond issue of $20,000 to pay for two bridges which are to be built over the Bronx River between Yonkers and Tuckahoe.

✚LACKAWANNA, N. Y.—We are officially advised that bids for constructing a highway bridge were received on June 5, as follows: Alexander W. Bellony, Buffalo, N. Y., $20,448; FRED. C. STRADE, Lackawanna, $16,670 (awarded contract); Corry Bridge & Supply Co., Corry, Pa., $19,025; Benjamin F. Spire, Buffalo, $20,680; Frank L. Cohen, Buffalo, $18,058.

HACKENSACK, N. J.—Bids for constructing the Mahwah bridge have been received as follows: John T. Harrop Co., $15,000; John H. Magee, $14,280; Cement Paving & Construction Co., $12,487; Ernest Abraham, $12,190; F. R. Long Co., $12,183; F. W. Schwiers Co., $10,582.

EAST STROUDSBURG, PA.—Bids will be received by the County Commissioners, Jos. Overfield, Clk., until 11 a. m., June 26, and July 3, for constructing four stone bridges.

*KUTZTOWN, PA.—Bids will be received by the County Commissioners at Reading, Pa., until 10 a. m., June 28, for erecting the substructure of the Kutztown bridge No. 1. A. L. Rhoads is County Controller.

McELHATTAN, PA.—All bids received on June 1 for constructing a steel highway bridge were rejected. New bids will soon be asked. The superstructure will consist of ten duplicate plate girder spans each 97.5 ft. long with a 16-ft. roadway, and the substructure, of nine reinforced-concrete piers and two reinforced-concrete abutments. Plans and specifications are on file with the Farris Engineering Co., Civil and Bridge Engrs., Jenkins Arcade Bldg., Pittsburg.

ROXBURY, VA.—The Supervisors of New Kent and Charles City Counties have decided to build a new bridge to span the Chickahominy River. The new structure will be of white oak, 432 ft. long.

MORGANTOWN, W. VA.—Engineers are at work on the surveys for a railroad bridge over the Monongahela River. The structure will have a 470-ft. span. Col. J. M. Schoonmaker is interested.

✚CHARLOTTE, N. C.—We are officially advised that a contract for constructing a concrete bridge with steel approaches over the Catawba River on the National Highway between Charlotte and Gastonia, has been awarded to the C. W. REQUARTH CO., Lancaster, S. C., at $52,500.

BRUNSWICK, GA.—The Commissioners of Glynn and McIntosh Counties are considering the construction of a highway bridge over Altamaha River, near Darien, to connect the two counties. The structure has been estimated at $80,000. H. F. Dunwody is interested.

COVINGTON, GA.—Bids are wanted for constructing a concrete bridge 20 ft. high, 60 ft. wide and 100 ft. long, and for paving with macadam a street 45 ft. wide, 1,400 ft. long. Geo. T. Smith is Mayor.

✚WEST POINT, KY.—The contract for erecting a bridge over Salt River, at West Point, has been awarded to the CAPITAL CONSTRUCTION CO., Columbus, Ohio, at $53,600. The bridge will be steel, riveted throughout with concrete piers and abutments and will be 800 ft. long. There will be a short span of 100 ft. and an approach of 176 ft. on each side, with a center span of 250 ft. The lower 40 ft. of the main piers are to be of concrete, 34 × 10 ft. in size, surmounted by steel tubes, 6 ft. in diameter and 52 ft. in length, filled with concrete. On these will rest the main structure 90 ft. above Salt River.

CHILLICOTHE, OHIO.—Bids for constructing a bridge over Paint Creek, have been received as follows: Farris Bridge Co., Pittsburg, Pa., concrete floor, $17,000; standard buckle plate floor, $19,400; Pennsylvania Bridge Co., Beaver Falls, Pa., concrete, $17,836; buckle plate, $19,367; Oregonia Bridge Co., Lebanon, Ohio, buckle plate, $19,000; Delaware Bridge Co., Delaware, Ohio, concrete $19,670; buckle plate, $23,030; Capital Construction Co., Columbus, Ohio, concrete, $15,696; buckle plate, $16,933; special plan superstructure, $17,000; combined substructure and superstructure, $36,000; Mount Vernon Bridge Co., Mount Vernon, Ohio, special plans A, buckle plate, $18,850; concrete, $16,600; plan B, buckle plate, $17,630; concrete, $15,940; engineer's plans, concrete, $16,300; buckle plate, $18,740; Wiley Bros., Frankfort, Ohio, substructure, $13,635.

FREMONT, OHIO.—Bids will be received by Geo. W. Bloom, County Audr., until 11 a. m., June 17, for furnishing all labor, material and tools necessary to repair the Mud Creek bridge floor system on the Port Clinton road, in Rice Township, with new steel stringers and plank floor. The plans and specifications for this work are on file in the office of the County Auditor and County Surveyor.

MIDDLEPORT, OHIO.—The County Commissioners are making preparations to construct an iron bridge at Bingham's Mills on Leading Creek. The span of the present wooden bridge is about 300 ft. long. By making longer fills and abutments this length can be cut 100 ft. in the new bridge. The new abutments will be about 25 ft. high

MISHAWAKA, IND.—The Commissioners of St. Joseph County have ordered plans prepared for the construction of a new bridge over the St. Joe River in Mishawaka. Estimated cost, $65,000.

✚WAVERLY, IND.—A contract for the construction of a 5-span concrete bridge across White River at Waverly has been awarded by the Morgan County Commissioners to the NATIONAL CONCRETE CO., at $38,750. The Hackedorn Co., Indianapolis, submitted a bid of $37,369.

SOUTH BEND, IND.—B[illegible] be received by the Commissioner[illegible] St. Joseph County until 11 a. m., Ju[illegible] for constructing seven flat top I-be[illegible] tak-ing down and re-erecting [illegible] truss bridge, and repairing a b[illegible] Eng Grove School, in Penn Tow[illegible] John W. Harbou is County Audr.

✚SALEM, IND.—The Wa[illegible] County Commissioners have award[illegible]s for construction of one concret[illegible] steel bridge to F. J. and H. F. Bl[illegible]mond, Ind.

CHICAGO, ILL.—We are off[illegible] advised that the contract for constru[illegible] foundations of a double-track br[illegible] over the Calumet River at Chicago, for [illegible]more & Ohio R. R., has been a[illegible] to the FOUNDATION CO., 115 B[illegible] New York, N. Y. The foundations [illegible] bridge will consist of six pneumatic [illegible]ders, 12 ft. in diameter, sunk to a d[illegible] 65 ft. below water and then carried [illegible] through clay and hardpan to bed rock. [illegible] abutment pier, 18 ft. × 35 ft., car[illegible] ft. below water supported on piles. [illegible] contract also includes the driving of al[illegible] for the fender protection and the pla[illegible] the reinforced-concrete girders which [illegible] the sylinder piers.

CLINTON, ILL.—Bids will b[illegible]ved at the Court House, Clinton, un[illegible] a. m., June 23, for the construction of [illegible]inforced-concrete bridge consisting of tw[illegible] girder type spans with an 18-ft. [illegible]way. R. S. McBride is Town Clk., Farm[illegible]ity, Ill.

GILSON, ILL.—Bids will be re[illegible] by F. Burnaugh, Town Clk., until [illegible] 17, for the construction of a bridge [illegible] Spoon River to cost about $5,000. J. [illegible]ravy is Chn. County Com. at Galesburg.

LAMOILLE, ILL.—Bids will be received by the Town Clerk until 10 a. m., June 22, for the construction of two small [illegible]inforced-concrete bridges in Lamoille Township, Bureau County. J. H. Showalter is Town Clk.

MOUNT CARROLL, ILL.—Bids will be received at the Court House, Mount Carroll, until 2 p. m., June 20, for the construction of two small reinforced-concrete bridges in Salem Township. S. A. Kein is Town Clk.

PAXTON, ILL.—Bids will be received by the Town Clerk until 2 p. m., June 20, for the construction of eight small reinforced-concrete bridges in Paxton Township. V. E. Johnson is Town Clk.

✚OCONTO, WIS.—J. YOUNG & BROS. have been awarded a contract by the Chicago & Northwestern R. R. to build two railroad bridges at a total cost of $22,500.

✚MILWAUKEE, WIS.—We are officially advised that the contract for constructing a 1-leaf bascule bridge across the Milwaukee River at Oneida St. was awarded on June 10 to the MILWAUKEE BRIDGE CO., Milwaukee, at $55,745 for superstructure, $92,845 for entire work. The other bids were: Modern Steel Structural Co., Waukesha, Wis., superstructure, $71,469; Heil Co., Milwaukee, superstructure, $53,875, entire work, $99,875; A. Vogel (Starke Dredge & Dock Co.), Milwaukee, entire work, $104,272; Strobel Steel Construction Co., Chicago, Ill., superstructure, $66,400; J. E. Hathaway & Co., Milwaukee, substructure, $44,0[illegible]. L. J. Klug is Supt. Bridges. Noted on June 1.

ALBERT LEA, MINN.—We are officially advised that plans are being prepared for an 80-ft. span concrete bridge. Wm. Barnick is City Engr.

✚MANKATO, MINN.—The contract for constructing two concrete bridges has been awarded to the MARSH ENGINEERING CO., Des Moines, Iowa, at $5,650.

ST. PAUL, MINN.—Fred. Nussbaumer, Supt. of Parks, is having plans prepared for the Park Commission, for a steel and concrete bridge across River Boulevard at St. Clair St. Cost, $5,000.

✚HUTCHINSON, KAN.—We are officially advised that the contract for the construction of a reinforced-concrete slab and girder bridge, 50 ft. long, 15-ft. spans, and 90 ft wide, was awarded on June 2 to the ST. JOSEPH CONSTRUCTION CO., St. Joseph, Mo.

✚ASHLAND, NEB.—The contract for furnishing all the steel to be used in the Platte River bridge to be constructed at Ashland has been awarded to the OMAHA STRUCTURAL STEEL WORKS, Omaha, Neb. The structure will consist of six 160-ft. spans on steel and concrete caissons.

LINNEUS, MO.—Bids will be received until July 5, for constructing 13 steel bridges, ranging from 20-ft. to 58-ft., I-beam girder type. Wade Ten Eyck is County Highway Engr.

FORT SMITH, ARK.—The Purcell-Lexington Toll Bridge Co. has been organized to construct a bridge over the South Canadian River at a cost of $100,000.

EL PASO, TEX.—The Galveston, Harrisburg & San Antonio R. R. Co., of El Paso, . will receive bids for one month for the construction of a viaduct and road along the county road. It will be 641 ft. long and 37 ft. wide, and will be paved with bitulithic. Three reinforced-concrete trestles will also be constructed. The cost is estimated at $70,000 and will be borne by several railroads.

GALVESTON, TEX.—Bids will be received by John M. Murch, County Audr., Galveston, Tex., until 11 a. m., June 19, for the construction of a wooden piling bridge across Highland Bayou, on Galveston-Hitchcock Road, according to plans and specifications on file with the County Auditor.

✚FORT WORTH, TEX.—The contract for the construction of a concrete bridge over Marine Creek on 24th St., North Side, has been awarded to DENNIS FEAGAN at $8,000.

BOISE, IDAHO.—The Commissioners of Boise County are considering the construction of a $10,000 steel bridge across the Payette River at the March-Ireton Ranch.

## BUILDINGS.

(*Denotes that *this work is advertised in Engineering News.*)

*WATERVILLE, ME.—**Bids will be received until July 26 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring and lighting fixtures), of the U. S. post-office at Waterville, Me. Drawings and specification may be obtained from the Custodian of site at Waterville, Me., or at the discretion of the Superv. Arch.**

RICHFORD, VT.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has rejected all bids received for post-office at Richford, Vt., as being in excess of the appropriation.

REVERE, MASS.—Plans and specifications are being prepared by Lockwood, Greene & Co., Boston, Mass., for a 4-story reinforced concrete warehouse for the New England Waste Co. at Revere, Mass. The building will be 1[illegible] × 56 ft., and the mushroom type of construction will be used.

✚HOLYOKE, MASS. — Contracts for the store, office and apartment block to be erected for Dr. Wilfred G. Deroin at Main and Cabot Sts. have been awarded as follows: Excavation, **JERRY BEAULIEU**; mason work, **JOHN J. PYNE**; carpenter work, **ISRAEL DUCHARME**; plumbing, roofing and metal work, **E. H. FRIEDRICH CO.**; iron work, **G. HAARMAN & SON**; cut stone work, **DAVID McCORMICK & CO.** The block will be 55 × 100 ft., five stories high, of pressed brick with limestone trim. Oscar Beauchemin is the Arch. (Noted March 23.)

Ellsworth & Howes are completing plans for an apartment block to be erected at Pearl and Allyn Sts. for Frank H. Dibble. It will be three stories high, 100 × 142 ft., with face brick on two sides with Ohio sandstone trim.

Plans for an apartment block at 101 Beach St. for Mrs. Ellen Collins are being completed by Archs. George P. B. Alderman & Bro. The building will be of brick, five stories high, 55 × 57 ft., with brownstone trim and steam heat.

✚NORTHAMPTON, MASS.—Contracts for the office building of the Nonotuck Silk Co. have been awarded as follows: General contract, **CASPER RANGER**, Holyoke, Mass.; steel work, **WALSH'S HOLYOKE STEAM BOILER WORKS.**

BOSTON, MASS.—It is proposed to build a branch public library at the North End, to cost $85,000. Col. Josiah Benton is Pres. of Public Library Trustees.

A municipal building is proposed for Ward 7, also for South Boston. Manus J. Fish is Supt. of Public Buildings.

The City Hospital expects to enlarge its plant by the expenditure of $300,000, mainly for buildings. A. Shuman is Chn. Hospital Trustees.

An apartment block, of brick, three stories, 90 × 40 ft., to cost $40,000, is to be built for R. G. Crosby, on Talbot Ave., Dorchester District. Clinton Noble is the Arch.

HAVERHILL, MASS.—A 7-story apartment house will be erected by Leslie K. Morse, of the Hub Real Estate, on the site of the Eagle Hotel. The structure will be constructed of tapestried brick with stone trimmings. There will be two stores on either side of the main entrance, which will be 60 ft. deep. The second floor will be set apart for office purposes. The upper floors will be divided off into suites of two and three rooms and single rooms. The suites will be provided with private baths. The building will be equipped with an electric elevator.

HARTFORD, CONN.—Mrs. Charles E. Bond will erect a $60,000 tile dwelling on Prospect Ave.

DERBY, CONN.—Griggs & Hunt, 35-51 Leavenworth St., Waterbury, Conn., have completed plans for a 3-story brick office building, 30 × 50 ft., for the Birmingham Iron Foundry.

DANBURY, CONN.—Plans are being prepared by F. Alton Clark, Hobson Block, Naugatuck, Conn., for a brick store and office building on Main St. for the Henry Dick Co. The building will be 97 × 136 ft., three stories high and steam heated.

✚NEW HAVEN, CONN.—The contract for the erection of the Day Missionary Library on Elm St. has been awarded to the **DAVID H. CLARK CO.**, 166-178 Brewery St., New Haven, who has sublet the plumbing and heating to **MENZIES & MENZIES**, 198 Orange St., New Haven. The building will be 80 × 120 ft., two stories high, of brick with marble and limestone trim, tile roof and steam heat. Delano & Aldrich, 4 East 39th St., New York, are the Archs. (Noted March 16.)

BLASDELL, N. Y.—The Board of Education will receive bids until June 15 for erecting a school and making alterations and additions to present school. Harris & Merritt, Buffalo, N. Y., are Archs.

✚BUFFALO, N. Y.—**The Larkin Co., Buffalo, N. Y., are preparing plans for a 10-story reinforced concrete warehouse. The building will be 580 × 109 ft., and Lockwood, Greene & Co., of Boston, Mass., have been retained as consulting engineers in connection with the design, which will probably be of the mushroom type. The entire contract for the erection has been awarded to the ABERTHAW CONSTRUCTION CO., Boston, Mass. The building, of 613,000 sq. ft. of floor space, will be divided into three parts, with loading platforms and elevators adjacent to the four railroad tracks running through the building.**

BUFFALO, N. Y.—**Francis G. Ward, Comr. of Pub. Wks., is advertising for bids for remodeling the Broadway Arsenal for use as a city convention hall and exhibition building,** including structural steel galleries, new roof, steel ceilings, heating and ventilating systems and electric power plants. Estimated cost, $100,000.

Robert North, 1330 Prudential Bldg., Buffalo, has completed plans for a 3-story and basement residence, 40 × 50 ft., of hollow tile and stucco, and garage of same construction, to be erected on Chapin Parkway, near Potomac Ave., for Mrs. Charles A. Sweet, 1040 Delaware Ave.

The Huebner-Bleistein Patents Co. is having plans prepared by Colson & Hudson, 35 Dun Bldg., for a 2-story and basement, brick and steel office building, 50 × 112 ft., which it will add to its lithographing plant at Kensington Ave. and the New York Central R. R. Belt Line.

A. A. Post, Brisbane Bldg., has completed plans for a 3-story and basement school building of brick and structural iron, to be erected on Court St., near Niagara Sq., by the Church of St. Anthony de Padua. Estimated cost, $55,000.

CEDARHURST, L. I., N. Y.—Plans have been completed by Alfred G. Bossom, 366 Fifth Ave., New York City, for the construction of a brick and stone dwelling. The cost is about $50,000. Mrs. Henry Whiton is owner.

✚ITHACA, N. Y.—**ALEXANDER, SHUMWAY & UTZ**, Rochester, N. Y., have secured general contract for construction of Rand Hall, 50 × 169 ft., three stories, and Sibley College, 32 × 45 ft., three stories, to be erected on Cornell Campus, by Cornell University, to cost $350,000.

FAR ROCKAWAY, N. Y.—It is reported that the Postal Telegraph-Cable Co. has purchased a plot of land in Grandview Ave., north of Rue de St. Felix, Far Rockaway, on which the company will build a receiving station, to cost $50,000. The property was purchased from Mrs. Francis Frankfort and Edward A. New.

ALBANY, N. Y.—The Board of Contract & Supply, Albany, has fixed upon July 10 as the date for receiving bids for the proposed new high school to be erected on Western, Washington and Lake Aves. Alternate bids will be asked, covering the entire work and covering the plumbing, heating and electrical wiring.

NEW YORK, N. Y.—Plans have been filed for the construction of a dwelling for Charles Howland Russell at 73d St., 138 ft. east of Park Ave. It will have a frontage of 22 ft. and a depth of 87 ft. The cost is about $60,000.

It is reported that a building, 25 stories high, will be erected on the site of Madison Square Garden, and that preliminary sketches have been prepared by Warren & Wetmore, 3 East 33d St. The organization of the F. & D. Co., which will take over the site, has been perfected in the offices of Olney & Comstock, 68 William St. The operation involves an expenditure of $12,000,000.

NEW YORK, N. Y.—A 16-story building will be erected by the Aeolian Co., at 42d St., between Fifth and Sixth Aves., on the site of West Presbyterian Church. Warren & Wetmore, 3 East 33d St., are the Archs. The cost is about $1,500,000.

Plans are being prepared by William H. Gompert, 2102 Broadway, for the construction of a 16-story office building at 116-122 West 32d St. L. H. Slawson, Pullman Bldg., 17 Madison Ave., is owner.

Plans have been completed by Blum & Blum, 507 Fifth Ave., for the erection of a 12-story apartment building on the southeast corner of Park Ave. and 78th St. The Park Ave. Co., 103 Park Ave., is the owner. The cost will be about $1,200,000.

Plans are being prepared by Charles E. Birge, 29 West 34th St., for the construction of a 12-story office and loft building, to be erected at 106 East 19th St.

Plans are being prepared by Neville & Bagge, 215 West 125th St., for the construction of a 12-story apartment house on the southwest corner of 143d St. and Broadway. The cost will be about $400,000. Patrick McMorrow, 3785 Broadway, is owner.

Plans are being prepared by Walter B. Chambers, 35 Wall St., for the construction of a 9-story elevator apartment house, to be erected at 133 to 137 West 58th St. James Livingston Construction Co., 18 West 27th St., is owner.

M. W. Del Gaudio, 401 Tremont Ave., has prepared plans for the erection of a 5-story tenement house, 50 × 88 ft., for the Terrace Bldg. Co., East 190th St., on the south side of 187th st., west of Belmont Ave. The cost is about $50,000.

Plans have been prepared by L. A. Sheinart, 194 Bowery, for the erection of a 6-story tenement building for the Savoy Holding Co., 226 Lafayette St., at 150-2 Sullivan St. The cost is about $55,000.

Plans are being prepared by Charles B. Meyers, Union Sq., for the construction of three tenement buildings on the east side of Ridge St., 152 ft. north of Delancey St. The Ridge Holding Co., 145 Broadway, is owner.

Plans are being prepared by Charles Schaefer, Jr., 1910 Webster Ave., for the construction of three 5-story tenements on the west side of Clinton Ave., south of 175th St., for the Plough Fox Co., 391 East 149th St. The cost is about $90,000.

NEW YORK, N. Y.—Plans are being prepared by Elisenla & Carlson, 302 51st St., Brooklyn, for the construction of two 5-story tenements for William Beckman, 553 46th St., at 46th St., west of Fifth Ave. The cost is about $80,000.

Plans have been prepared by Bernstein & Bernstein, 24 East 23d St., for the construction of a 6-story garage at 229-231 West 60th St. Mrs. A. Benjamin is owner. The cost is about $100,000.

**Bids will be received by C. B. J. Snyder, Supt. of School Buildings, until June 26, for the general construction, etc., of the Bushwick High School, on the southerly side of Irving Ave., about 260 ft. west of Putnam** Ave.; for furniture for addition to Public School 19, on the westerly side of Keap St., between South Second and Third Sts.; for installing electric equipment in new Public School 171, on Ridgewood, Lincoln and Nichols Ave., Boro. Brooklyn.

DERBY, N. Y.—Cyrus K. Porter & Sons, Hutchinson Bldg., Buffalo, have completed plans and will receive bids for a 3-story and basement residence, 65 × 168 ft., of stone and tile and marble, to be erected by Edward Michael, 618 Brisbane Bldg., Buffalo. Estimated cost, $80,000.

✚UTICA, N. Y.—Leon H. Lempert & Son, Cutter Bldg., Rochester, have completed plans and let contract to **JOHN AUTES & SON**, Utica, for a 2-story and basement theatre building, 110 × 150 ft., to be erected for Harris Lumberg, Niagara Falls, N. Y. Estimated cost, $70,000.

Plans are being prepared by Barnett, Haynes & Barnett, Century Bldg., St. Louis, Mo., for the construction of a $300,000 stone orphan asylum.

HACKENSACK, N. J.—Bids have been received by the Board of Education for the proposed State St. school. The low bidder was John I. Brady & Co., Court House, at general contract, $109,791; face brick, as provided for in the alternative, $107,691; heating and ventilating, $16,800; plumbing, $5,400; lighting, including both electric and gas fixtures, electric bells, the clock system, etc., $2,849.

MONTCLAIR, N. J.—Plans have been approved by the Town Council for the construction of a 5-story office building on Bloomfield and Glen Ridge Aves. The Edward Madison Co. is owner. The cost is about $60,000.

PLAINFIELD, N. J.—George W. Knight, of Newark, was engaged by the Plainfield Board of Education as heating and ventilating engineer for the $50,000 addition to the $150,000 high school building. James Gamble Rogers, New York, was retained as Arch.

✚BEN AVON, PA.—The contract has been awarded to **ROSE & FISHER** for the construction of a 1-story church on Church Ave. The cost is $40,000.

✚PHILADELPHIA, PA.—**JOHN DUNCAN**, 920 Walnut St., has been awarded the contract for the Polyclinic Hospital on Naudain and 18th Sts.

Ralph E. White has completed plans for a 5-story college building, 50 × 150 ft., for the Medico-Chirurgical Hospital contemplated here.

✚The **RAYMOND CONCRETE PILE CO.**, 90 West St., New York City, and Chicago, has been awarded the contract for placing the concrete piles for the foundations of a new building to be erected for the American Can Co. at Palmer and Beach Sts., Philadelphia. N. M. Loney is Engr.

WEST PHILADELPHIA, PA.—The Board of Education received the following bids for the construction of the district high school: A. Raymond Raff, $1,352,000; J. G. Doak & Co., $1,262,894; William Steele & Sons Co., $1,289,000; B. Ketcham & Sons, $1,330,000; Cramp & Co., $1,275,000; Mitchell Bros., $1,489,727. The amount set aside for the building is $1,200,000.

BALTIMORE, MD.—It is reported that Frank Singer will erect about 100 dwellings on the east side of Park Heights Ave., near Gordon Lane. The operation involves an expenditure of about $200,000.

BALTIMORE, MD.—Hyman S. and Mamie S. Tinley are having plans and specifications prepared by Hyman J. Tinley, 314 North Charles St., for an apartment house at Roslyn and Bateman Aves., to be of brick construction, stone foundation, three stories, steam heat, gas and electric lighting, plumbing, and cost about $50,000.

Samuel Sigael, 215-17 Courtland St., will erect an apartment house on Windsor Mill Road; will be of ornamental brick and stone construction, steam heat, gas and electric lighting, plumbing, and cost $150,000.

F. W. Trimble & Co., 908 Law Bldg., have commissioned Charles E. Cassell, Law Bldg., Baltimore, to prepare plans and specifications for an apartment house, to be at Charles St. and Jones Falls Blvd. The cost is about $150,000.

The Hebrew Hospital and Asylum, Monument St., east of Broadway, will have plans and specifications prepared by Parker, Thomas & Rice, 1109 Union Trust Bldg., for nurses' home in connection with the present institution. Dr. Harry Adler, Pres. of Board of Trustees, 1804 Madison Ave. Building will be known as Hecht Memorial, 100 × 40 ft., three stories, brick, to accommodate 60 nurses; cost, $50,000.

H. J. West, 16 St. Paul St., is taking subbids on the Georgian Court Apartments, to be erected at Roland Ave. and University Parkway. The building will be six stories, of brick and stucco construction, stone trim, etc.

J. G. and M. Rhode, 1042 North Stricker St., have commissioned John R. Forsythe, 232 St. Paul St., Baltimore, to prepare plans and specifications for an apartment house.

✚The Eutaw Place Baptist Church has awarded contract to **A. KNELL, JR.**, 215 St. Paul St., for the erection of an edifice at Eastern Ave. and Robinson St. Plans by Glidden & Fritz, 16 St. Paul St. The building will be of brick construction, two stories, 38 × 33 ft., electric lighting and steam heat.

The Western National Bank, Eutaw St., near Fayette St., will make extensive alterations to their present building. Haskell & Barnes, Wilson Bldg., have nearly completed plans and specifications, and bids will be received at an early date. Cost, about $100,000.

✚WASHINGTON, D. C. — **The Equitable Building Association has received a building permit for the erection of the proposed bank building at 915 F St. Plans were prepared by Pyle & Heaton. The contract is held by GEORGE A. FULLER CO. The estimated cost is $70,000.**

✚NORFOLK, VA.—The contract has been awarded to **J. HENRY MILLER, INC.**, for the new Union Station for the Norfolk & Western R. R., at Norfolk, Va. It will cost $500,000. The plans, which were prepared by Reed & Son, New York, call for a building of structural steel, with terra cotta and limestone trimmings. It will cover a block bounded by Main St., Archer Lane and Lake Ave. The same firm is erecting the new Union Station for the Pennsylvania R. R. in Baltomore.

RICHMOND, VA.—The Zion Baptist Church, Rev. W. T. Anthony, Pastor, will erect an edifice to replace the burned structure, to be of brick and stone construction, gas, electric lighting, and plumbing. The architect will be selected shortly.

✚It is reported that the Richmond Hotel Co. has awarded the contract to **E. W. MINTER & CO.**, New York, to erect a 10-story addition to the Richmond Hotel; also for two additional stories to the present structure, and converting the upper floor into an assembly hall to seat 1,000 people. Cost, $500,000. Plans by John Kevan Peebles, Norfolk, Va.

JOHNSON, W. VA.—Plans have been prepared for the proposed Johnson Memorial Church. The cost will be about $75,000.

ATHENS, GA.—The University of Georgia will erect an addition to be used as a law school. The cost is about $50,000. D. C. Barrow, A.M., is Chn. of Faculty.

GADSDEN, ALA.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has rejected all bids received for the U. S. post-office at Gadsden, Ala., as being in excess of the appropriation.

GLENDALE, MISS. — A dwelling, costing $40,000, will be erected here by the Hon. Charles Smith. George F. Barber is Arch.

✚GREENWOOD, MISS.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a U. S. post-office at Greenwood, Miss., to the **STUART-RANDALL CONSTRUCTION CO.**, Brookhaven, Miss., at $48,453.

DUCKTOWN, TENN.—Bids will be received by the Board of Education until June 15 for constructing two schools in Polk County. R. Gratt & Son, Knoxville, Tenn., are Archs.

MEMPHIS, TENN.—Announcement is made here that work will begin within a short time on a new station by the Illinois Central R. R. Co., at the corner of Main St. and Calhoun Ave. The structure, which will be modeled after the Pennsylvania station in New York, and other improvements will cost about $3,000,000.

✚DYERSBURG, TENN.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded the contract for the construction of a U. S. post-office at Dyersburg, Tenn., to **ROGERS & KAISER**, Chicago, Ill., at $42,140. (Noted April 27.)

✚LOUISVILLE, KY. — The contract has been awarded to the **FALLS CITY CONSTRUCTION CO.**, Louisville, for the construction of a 10-story office building on Jefferson and Center Sts. The cost is $300,000. Plans were prepared by H. Walters, Louisville.

CHILLICOTHE, OHIO.—The Board of Education will receive bids until July 3 for constructing a school. Plans were prepared by John Schweitzer, Chillicothe. The cost is about $50,000.

CINCINNATI, OHIO.—The Board of Education will receive bids until July 3 for constructing the Guilford school, at Fourth and Ludlow Sts. The probable cost is $180,000. C. W. Handman is Bus. Mgr.

✚COLUMBUS, OHIO.—It is reported that a contract of over $100,000 was awarded today to the **CONCRETE STEEL CO.**, Cincinnati, for the building of the Citizens' Wholesale Supply Co. here.

✚HUNTINGTON, OHIO.—The **IBAC CONSTRUCTION CO.**, Huntington, has been awarded contract for erection of a Masonic temple in this city. W. T. Mills is Arch. Cost, $150,000.

AKRON, OHIO.—The capital stock of the Portage Hotel Co., Akron, Ohio, has been increased from $50,000 to $75,000 in order to erect a larger structure.

✚COLUMBUS, OHIO.—The **FRANCIS BROS. CO.** has been awarded the contract for the masonry for the new hotel building to be erected at Long and Fifth Sts., by the Central Ohio Land Co. The **McMASTER ELECTRICAL CONSTRUCTION CO.**, Columbus, was awarded the contract for the electrical equipment.

IRONTON, OHIO.—**Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until July 17, for the construction, complete (including plumbing, heating apparatus, electric conduits and wiring and lighting fixtures) of the U. S. post-office at Ironton, Ohio. Drawings and specification may be obtained from the Custodian of site at Ironton, Ohio, or at the discretion of the Superv. Arch.**

MIDDLEPORT, OHIO.—**F. L. Packard has prepared plans for a $50,000 Carnegie Library building, to be erected at Middleport, Ohio.**

BROAD RIPPLE, IND.—**The School Trustees of Washington Township have ordered plans for the construction of a new high school building. Herbert L. Bass, Indianapolis, is Arch.**

✚GARY, IND. — **The School Board has awarded ENGLISH BROS., Champaign, Ill., the contract for the erection of the Froebel school building, at $207,500. The building will include a public bath, gymnasium for men and women, a library and entertainment hall. The schoolrooms will provide for 2,400 scholars. The School Board has also purchased a site on which a parental school will be built, to cost $150,000. Bids for this structure will be received in a few weeks.**

INDIANAPOLIS, IND.—Herbert L. Bass is drawing plans for a 3-story tenement on Broadway. The building will be 80 × 75 ft., brick and stone and fireproof. A cafe and kitchen in the basement, and a refrigerating plant and vacuum-cleaning plant will be installed.

The Fletcher Realty Co., Stoughton A. Fletcher, Pres., are preparing to ask for bids for the erection of a business and office building in East Washington St. The building will be of brick, stone and steel and 21 stories high. Estimated cost, $500,000. Jarvis Hunt, Chicago, Ill., is Arch.

SOUTH BEND, IND.—Bids will be received by John A. Wood, Supt. of City Schools, about July 1, for the erection of the high school. Plans by William B. Ittner, Board of Education Bldg., St. Louis, Mo.

STENDAL, IND.—Bids will be received by F. J. Corn, Township Trustee, until June 20, for erecting a school.

BERWYN, ILL.—Bids will be received until June 16 by M. M. Hitchcock, Secy. School Bd., for the erection of two 2-story school buildings in School District 100, Cook County.

✚CHICAGO, ILL.—The contract has been awarded to JOHN GRIFFITHS & SON for the construction of the 10-story building for Rothschild & Co., to be erected on State St. from Van Buren St. to Jackson Boulevard. The building will have a double basement, will be fireproof, steel constructed, of granite and terra cotta, and will occupy 360 × 144½ ft. There will be two entrances on Van Buren St., adjoining the "L" station, four on State St., one on Jackson Boulevard, 16 ft. in width. The estimated cost of the building is $4,000,000, and the estimated value of the leasehold $2,000,000. The architects are Holabird & Roche.

✚PEORIA, ILL.—The Board of Directors of the Y. M. C. A. awarded the contract for the construction of a Y. M. C. A. building to the firm of WILLIAM ALLEN & SON. It will cost in the neighborhood of $100,000, exclusive of furnishings.

*GILLESPIE, ILL.—Bids will be received until July 5 for the construction of the new City Building to be erected at Gillespie, Macoupin County. Plans for the same are now on file at the office of the City Clerk in the city of Gillespie, Ill., and at the office of A. T. Simmons, Bloomington, Ill.

✚PANA, ILL.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a U. S. post office at Pana, Ill., to JAMES CORSE, Racine, Wis., at $58,325.

MILWAUKEE, WIS.—Charles L. Lesser, 396 National Ave., is preparing plans for a business building to be erected for the Casper-Jochem Co. at the northwest corner of Eleventh and National Aves. The building will contain two stores, 100 × 93 ft., and will contain a moving-picture theater. The building will be of solid brick and concrete, with steel girders and floor beams. The interior finish will be hardwood, with tiled floor and wainscoting in all lavatories. All the store ceilings will be of steel, with plate and art-glass fronts, and the theater front and lobby will be of stucco in ornamental design. The building will cost about $50,000.

✚WAUPACA, WIS.—The general contract for the construction of the new Waupaca city high school has been awarded to HANS P. KNUDSON, Waupaca, at $39,341. The building complete will cost $52,030.

DES MOINES, IOWA.—Press reports state that Ernest W. Brown plans to build an 8-story business block and apartment house at West Fourth and Chestnut Sts., at a cost of $135,000. Above the first floor the building will be divided into 128 apartments.

KEOKUK, IOWA.—A hotel, costing about $150,000, will in all probability be constructed here, it is reported.

SIOUX CITY, IOWA.—Plans are being prepared by Buechner & Orth, 500 Shubert Bldg., St. Paul, Minn., for a hospital and boiler house for the Sisters of Mercy here. It will be three stories high, 40 × 200 ft., of brick and cut stone construction. Cost, $40,000.

✚ATCHISON, KAN.—The REYBURN LAIRD CO., Kansas City, Mo., has been awarded the contract for the construction of the drug house for the Wherrett-Mize Co., at $51,835.

TOPEKA, KAN.—The Board of Education will receive bids until June 12, making additions and alterations to the State St. and Monroe schools.

SIDNEY, NEB.—Bids will be received until June 27 by the Board of County Commissioners for erecting a 2-story, 62 × 85-ft. court house. The Fall River Co., Hot Springs, S. Dak., are Archs. The cost is about $50,000.

ABERDEEN, S. DAK.—A 3-story passenger station will be constructed here by the Chicago, Milwaukee & St. Paul R. R. Co. The cost is about $150,000. C. F. Loweth is Ch. Engr.

CANTON, S. DAK.—Bids will be received by R. G. Valentine, Comr. Indian Affairs, Washington, D. C., until June 20 for furnishing materials and labor for constructing and completing one hospital building for the Canton Insane Asylum, S. Dak.

HALSEY, S. DAK.—Bids will be received by the Board of Education until June 22 for constructing a brick school. W. A. Johns is Clk. Plans were prepared by F. C. Kuehn, Huron, S. Dak.

✚SIOUX FALLS, S. DAK.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a post office at Sioux Falls, S. Dak., to J. P. CULLEN, Janesville, Wis., at $174,726.

MAYVILLE, N. DAK.—Bids will be received by E. J. Taylor, Pres. State Normal School, until June 27, for constructing a 2-story brick hospital. Plans were prepared by J. Bell De Remer, Grand Falls, N. Dak.

LEWISTOWN, MONT.—The plans prepared by Wasmansdorff & Eastman for the central school building, to cost about $70,000, have been adopted by the City School Board. The building will afford accommodations for about 400 students.

SPRINGFIELD, MO.—Bids will be received by Ellis Paxson until June 26 for the construction of a court house. Miller, Opel & Torbitt, Merchants' National Bank Bldg., are Archs.

✚WARRENSBURG, MO.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a U. S. post office at Warrensburg, Mo., to HOLLADAY & CROUSE, Greensboro, N. C., at $58,915.

BENTON, ARK.—Bids will be received by the County Commissioners at Benton until June 16 for constructing a jail; separate bids for cell work. Frank W. Gibb & Co., Gazette Bldg., Little Rock, are Archs.

VICTORIA, TEX.—Bids were received as follows on June 9 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a U. S. post office at Victoria, Tex.: (a) limestone; (b) sandstone: Texas Building Co., Fort Worth, Tex., (a) $88,000, (b) $88,600; Otto P. Kroeger & Co., San Antonio, Tex., (a) $81,044, (b) $84,000; Bailey Mills Co., Victoria, Tex., (a) $91,641; Thames & Webber, Beaumont, Tex., (a) $87,195, (b) $87,495; Dieter & Wenzel Construction Co., Wichita, Kan., (a) $81,598, (b) $82,598; J. F. McKnight, Hallettsville, Tex., (a) $83,393.

MIAMI, OKLA.—The Board of Education, Charles L. Hale, Secy., will receive bids until July 1 for constructing three schools.

✚FORT COLLINS, COLO.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Fort Collins, Colo., to J. H. WIESE, South Omaha, Neb., at $83,889. (Noted on May 25.)

✚PHOENIX, ARIZ.—James Knox Taylor, Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a U. S. post-office at Phoenix, Ariz., to WILLIAM H. MAXWELL, Great Falls, Mont., at $140,847.

PASCO, WASH.—Bonds to the amount of $40,000 have been voted for the construction of a brick school to be located near the court house. The structure will be two stories high, terra cotta finish, with heating system, etc.

WALLA WALLA, WASH.—Plans have been approved by the Building Committee of the Baptist Church for the $60,000 edifice to be erected here.

✚FRESNO, CAL.—The contract for the grading and excavation for the new $1,000,000 division terminal to be constructed by the Santa Fe at Calwa, three miles from Fresno, was awarded to the H. HOUSER CONTRACTING CO., Los Angeles. The contract covers both Calwa and Riverbank, the terminal to be built about 100 miles north of Fresno.

✚OAKLAND, CAL.—The contract has been awarded to the JUDSON IRON WORKS for the steel work on the City Hall, at $234,376.

LOS ANGELES, CAL.—It is reported that Dr. W. J. Geierman, of Altadena, will erect a 4-story reinforced concrete building at base of Mt. Love, on Los Angeles forest reserve, to be known as Altadena Hygienic Hotel. Cost, about $150,000.

✚PASADENA, CAL.—The contract for building an Elks' home on West Colorado St. has been awarded to MATTHEW SLAVIN for $50,000.

SAN FRANCISCO, CAL.—A large hotel will be built on the southeast corner of Sixth and Clara Sts. by Edward B. Hindes. The building will have a frontage of 103 ft. on Sixth St., and will be 75 ft. deep. The front will be of pressed brick, with plate-glass windows for the stores and lobby. The cost is about $45,000.

Plans have been prepared for the construction of two apartments buildings. One of these buildings will be erected on the east line of Taylor St., 92 ft. north of Clay, for Patrick Noble. Plans were prepared by Dunn & Kearns. The other will be built by Mrs. Christine Blake, of Visalia, upon a lot 47.4 ×137.6, on the north line of Washington St., west of Hyde. It will be a 4-story and basement apartment house, to cost about $50,000. The building has been designed and planned by the same architects. There will be in all 24 apartments.

✚OAKLAND, CAL.—The following contracts have been awarded by the City Council for constructing the city hall, from plans by Palmer & Hornbostel, New York: Masonry work, GLADDING-McBEAN CO., Crocker Bldg., San Francisco, $122,360; structural steel work, JUDSON MFG. CO., 819 Folsom St., San Francisco, $234,376; concrete work, ROEBLING CONSTRUCTION CO., Crocker Bldg., San Francisco, $104,000; granite work and setting, RAYMOND GRANITE CO., Division and Potrero Sts., San Francisco, Proposition A, $19,680; McGILVRAY-RAYMOND GRANITE CO., Towsend and Eighth Sts., San Francisco, Proposition B, $160,000; architectural terra cotta, GLADDING-McBEAN CO., Crocker Bldg., San Francisco, $65,000; ornamental iron and bronze, CALIFORNIA ARTISTIC METAL & WIRE WORKS, 549 Seventh St., San Francisco, $97,700; plastering and imitation stone, C. C. MOREHOUSE, San Francisco, $40,750; imitation marble and tile work, JOSEPH MUSTO SONS-KEENAN CO., 535 North Point St., San Francisco, $104,993; rough carpentry work, OLIVER DUVAL, 1 Nat'l Bank Bldg., Oakland, $34,100; plumbing work, J. LOONEY, 85 City Hall Ave., San Francisco, $37,627; electrical work, JOHN G. SUTTON, 229 Minna St., San Francisco, $40,000. New bids will be received upon glass and glazing, elevators, dampproofing and dampproofing paint, painting, cabinet work and setting, heating and ventilating, metal furring, lathing, paving and sidewalks.

✚SAN DIEGO, CAL.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded the contract for the construction of a U. S. post-office at San Diego, Cal., to WILLIAM H. MAXWELL, Great Falls, Mont., at $188,848.

WELLAND, ONT.—Bids will be received until June 20 by J. McCarr, Secy. Pub. School Bd., for constructing a school. Plans were prepared by A. E. Nicholson, 46 Queen St., St. Catherines.

TORONTO, ONT.—Bids will be received by Burke, Horwood & White, 28 Toronto St., Toronto, until June 20, for the construction of the Central Building, 22-40 College St.

It is reported that a 20-story terminal building, with about 1,000 acres of floor space, and with tunnels under Queen and King Sts., from the Don River to Sunnyside, for the steam railways, is proposed. A. P. Gillies is interested. The cost of the project is about $100,000,000.

WINNIPEG, MAN.—Plans are being drawn for a union depot to be used jointly by the railroads here. S. L. Bartlett, of the Great Northern Ry. Co., St. Paul, Minn., is now engaged in preparing working plans. It will be two stories high, of brick, steel and fireproof construction. Cost, $100,000.

WINNIPEG, MAN.—Bids will be received until July 11, by P. E. Ryan, Secy. National Transcontinental Ry. Com., Ottawa, for the erection and completion of railway shops at Transcona (near Winnipeg). Plans, etc., on application to Gordon Grant, Ch. Engr., Ottawa, or S. R. Poulin, Dist. Engr., St. Boniface, Man.

✚REGINA, SASK.—The contract for the new union depot for the Canadian Northern and Canadian Pacific Rys. has been let to J. McDIARMID CO.

## WATER SUPPLY—IRRIGATION.

(✚*Denotes a contract awarded.*)

✚GREAT WORKS, ME.—The city has awarded contract to the ABERTHAW CONSTRUCTION CO., Boston, Mass., for the construction of eight new reinforced concrete flumes designed by Hardy S. Ferguson, Consult. Engr., 200 Fifth Ave., New York.

SALEM, MASS.—We are officially advised that preliminary plans have been made for the installation of a high-pressure salt water fire system, but no action regarding construction has been taken and probably will not be taken this year. George F. Ashton is City Engr., Noted on June 1.

✚AYER, MASS.—The contract for laying about two miles of 6 and 8-in. pipe, foundations for a standpipe, has been awarded to CHARLES M. CALLAHAN, of Boston, Mass. Lewis D. Thorpe is Consult. Engr. Noted on June 8.

BOSTON, MASS.—Bids will be received by the Metropolitan Water and Sewerage Board until June 23 for laying about 10,200 ft. of 24-in. c.-i. water pipe in Hyde Park Ave., from Forest Hills into Hyde Park. Dexter Brackett is Ch. Engr. W.-Wks.

BRISTOL, CONN.—The Bristol Water Co. has decided, it is reported, to increase its capital from $200,000 to $300,000 for the improvement and development of its storage facilities and further protection of its water sheds, and for the completion of work begun last year.

NEW BRITAIN, CONN.—The Water Board on June 6 instructed P. M. Blake, Engr., to prepare plans for and an estimate of cost of constructing a pipe line from Burlington Brook.

✚BUFFALO, N. Y.—The HOLLY MFG. CO., Roberts Ave., near Clinton St., Buffalo, has been awarded the contract by the city for pumping machinery. The contract calls for five 30,000,000-gallon pumping engines for the new pumping station on Porter Ave. Estimated cost, $700,000. F. G. Ward is Comr. Pub. Wks.

CONKLINGVILLE, N. Y.—Walter McCulloch, Consult. Engr., State Water Supply Comn., on June 7, submitted to the Senate Judiciary Committee the plans for the new water storage reservoir, which is provided for in the bill of Senator Howard R. Bayne to regulate the flow and sanitary condition of the Hudson River. The reservoir is to be built on thee Sacandaga River at Conklingville and will consist of a lake 30 miles long, with an area of 42 square miles. The total cost is estimated at $2,660,000 which is to be paid proportionately by owners of water storage plants benefited and municipalities. The plans provide for the regulation of the Hudson River, so as to prevent overflows in the spring. Noted on April 13 and May 25.

*NEWBURGH, N. Y.—Bids will be received by the Board of Water Commissioners until 5 p. m., June 26, for the completion of the contract for laying a 30-in. water main, together with work incidental thereto. Curtis Stanton is Supt. of Water Works, and William W. Hawkes, Pres.

YONKERS, N. Y.—The Board of Contract and Supply, James V. Mahoney, Secy., received bids as follows on June 5 for furnishing 513 lengths of 30-in. water pipe, 4,700 lbs. to the length, a total of 1,205 tons; 32 tons of special castings; five 24-in. geared gate valves, according to the standard of the New England Waterworks Association: Standard Cast-Iron Pipe & Foundry Co., pipe, per ton, $21.35; castings, per ton, $47.50; Warren Foundry & Machine Co., $21.50 and $45; valves, $180 each f. o. b. public wharf. For delivery to the Nepperhan Station of the Putnam R. R., according to the terms of the proposal; the company asked $22.50 for the pipe; Camden Iron Works, pipe, $21.70; castings, $47.50; valves, $160; United States Cast-Iron Pipe & Foundry Co., pipe, $22.20 and $50; John Fox & Co., $22.95 and $49.50; valves, $223; Eddy Valve Co., for valves, $160; Kennedy Valve Manufacturing Co., valves, $149.75; Rensselaer Valve Co., for valves, $734; extra work, $150.

CORNWALL, N. Y.—The village has been authorized by the State Water Commission ot spend $30,000 for constructing an additional storage reservoir.

*CROSSWICKS, N. J.—A[illegible] bids received May 26 by the Crosswicks [illegible] Co. George B. Thorn, Secy., for cons[illegible] a water-works system, including [illegible] pumping station with equipment, [illegible] or tower, collecting system and all [illegible] and accessories have been rejec[illegible] bids will be received until June 2[illegible] W. Young is Engr., 46 Park St., Bor[illegible] and 22[illegible] Broadway, New York.

RAHWAY, N. J.—Bids w[illegible]eived until 2 p. m., June 16, by D[illegible] M. Sawyer, Pres. Bd. Comrs., New Je[illegible]formatory, Rahway, for furnishing th[illegible]ary labor and material for the inst[illegible] of an independent source of water [illegible] including the following: Construction [illegible]rection of a tank and the installation [illegible]umps, and for furnishing and deliveri[illegible] o. b. Rahway, freight prepaid, c.-i. w[illegible] pipe, w.-i. pipe, valves, gates, etc., cem[illegible]and, lumber, brick, crushed stone, r[illegible]ing bars, nails, lead, manhole covers [illegible]rames, and any other material necess[illegible] Plans and specifications are on file at th[illegible]formatory.

SHREWSBURY, PA.—Th[illegible] will construct water-works improve[illegible] Bonds for $12,000 have been sold for th[illegible]pose.

MILTON, DEL.—We are o[illegible]lly advised that bids will be received ab[illegible] July 6 by the town for laying three [illegible] of pipe, constructing a 75,000-gallon [illegible]pipe, sinking two wells, and constru[illegible] pumping plant. Estimated cost, $14,[illegible] G. E. A Fairley, 511 Equitable Bldg., B[illegible]more, Md., is Engr. Noted on June 8.

LA PLATA, MD.—We are of[illegible]lly advised that bids will be received abo[illegible] June 20 by the town for installing severa[illegible]s of pipe, constructing a pumping plan[illegible] a 50,000-gallon tank, and other water [illegible] improvements. Estimated cost, $8,0[illegible] G. E. A Fairley is Engr., Equitable Bld[illegible], Baltimore, Md. Noted on June 8.

*BALTIMORE, MD.—Bids ad[illegible] to the Board of Awards will be re[illegible] at the office of the City Register, un[illegible] 11 a. m., June 28, for furnishing, deliver[illegible] and erecting, complete, one 30,000,000-g[illegible] vertical triple-expansion pumping engine, two batteries of two boilers each, [illegible] necessary steam piping between engines and boilers, the economizers for heating the feed water for the Mount Royal Pumping Station, according to the specifications which may be obtained at the office of Alfred M. Quick, Water Engr., City Hall. James H. Preston is Pres. Bd.

WASHINGTON, D. C.—Bids will be received until 2 p. m., June 20, by the District Commissioners for furnishing and delivering 5,000 ⅝-in. water meters for use in the Water Department.

LEXINGTON, VA.—The following bids for material and work on the new gravity water supply for Lexington were received on June 1: A. Wyckoff & Son, Elmira, N. Y., 41,000 ft. of wood pipe, $18,503; U. S. Cast Iron Pipe & Foundry Co., Philadelphia, Pa., 16,800 ft. of 8-in. c.-i. pipe, at $22.90 per ton, or $8,931; Glamorgan Pipe & Foundry Co., Lynchburg, Va., 16,800 ft. of 8-in. c.-i. pipe, at $23.50 per ton, or $9,165; Lynchburg Foundry, Co., Lynchburg, 16,800 ft. of c.-i. pipe, at $23.65 per ton, or $9,223; R. D. Wood, Philadelphia, Pa., 16,800 ft. of 8-in. c.-i. pipe, at $24 per ton, or $9,360; Central Foundry Co., 16,800 ft. of 8-in. Universal joint pipe, $11,592. Trenching and pipe laying: H. C. Brooks, Clarksburg, W. Va., $28,943; S. B. Bennington, Lynchburg, $22,024; J. L. Meem, Lynchburg, $28,386; Stamper Ragland & Co., Richmond, Va., $25,000; Gallagher & Bryan, Baltimore, Md., $22,537; Cantrell Construction Co., Parkersburg, W. Va., $23,655; J. F. McGuire, Norfolk, Va., $24,249; C. O. Ladd & Co., Germanton, Ohio, $19,960.

ASHEVILLE, N. C.—The Buckeye Water Co., of West Asheville, R. P. Hayes, Pres., will construct a gravity water system from Yadir Mountain, about four miles from West Asheville, to supply 200 gallons per min.

CONCORD, N. C.—The Water and Light Board has rejected bids submitted on May 31 for the construction of water-works, including an auxiliary pumping station; about two miles of c.-i. pipe, a 1,000,000-gallon reinforced concrete sedimentation reservoir and coagulating basin, and a 1,000,000-gallon filter plant. New bids will not be asked, it is reported, but contractors may submit bids now. Gilbert C. White is Engr., Durham, N. C.

HIGH POINT, N. C.—Bids will be received by Fred N. Tate, Mayor, until July 10, for the extension of water and sewer lines. Estimated cost, $50,000.

HEADLAND, ALA.—The town has voted to issue $7,500 of bonds for the extension and improvement of the water and electric light system.

✚NEWPORT, TENN.—The city has awarded the contract to the AMERICAN LIGHT & WATER CO., Chicago, Ill., for constructing a gravity system of water-works to have a daily capacity of about 300,000 gallons, at $46,940. W. P. Bullock is Engr., Kansas City, Mo. Noted on May 18.

✚CINCINNATI, OHIO.—The contract has been awarded by the city to C. UNDERHILL, 2878 Minto Ave., Cincinnati, Ohio, for laying water mains in L[illegible]wood Rd., Union Levee, etc., to Mt. Washington, at $9,572. Bids were received on May 22.

The Department of Public Service has ordered plans and specifications prepared for the construction of a new water tank for Mount Auburn, to increase the capacity of the tanks by 2,500,000 gallons.

URBANA, OHIO.—The City Council has authorized the Director of Public Service to engage a consulting engineer in connection with the proposed improvement of the water-works system.

✚*KENTON, OHIO.—Bids were received on June 6 by the city for building a 2,000,000-gallon concrete reservoir and pumping station for the water-works plant. The bids for the construction of the reservoir follow: Larkin Bros., Dayton, Ohio, $23,8[illegible]; William J. Miller, Detroit, Mich., $19,8[illegible]; BEERS OFFUTT CONCTRUCTION CO., Fort Wayne, Ind., $17,763 (awarded contract); Olsen &

Hefferan, Lima, Ohio, $23,356; John Burkhart, Kenton, $24,511; Charles Bird, Springfield, Ohio, $18,219. For the construction of the pumping station the bids were as follows: John Burkhart, $6,357; Olsen & Herreran, $4,536; Larkin Bros., $6,410; BEERS OFFUTT CO., $4,050 (awarded contract).

✚COLUMBUS, OHIO.—Bids were received on June 9 by H. S. Holton, Dir. Pub. Ser., for furnishing and delivering 108,000 lbs. of pig lead and 108,000 lbs. of lead pipe. Contracts have been awarded as follows: For pig lead, to NATHAN NOTTER & CO., Philadelphia, Pa., at $4.49; lead pipe, to the WESTWATER SUPPLY CO., at $5.03.

WEST TERRE HAUTE, IND.—The Town Council is considering a plan to construct and equip a new water-works plant.

CRAWFORDSVILLE, IND.—Bids will be received by Charles V. Hodgkin, Trustee of Union School Township, until 2 p. m., June 17, for sinking a tubular well.

HARBOR SPRINGS, MICH.—The city has purchased a private pipe line for the municipal water-works, at $20,000. Bonds for $15,000 have been voted for improvements to the plant.

HIGHLAND PARK, MICH.—The citizens have voted to issue $45,000 of bonds for water works extensions, it is reported.

IMLAY CITY, MICH.—Bids will be received by Horace Lamb, Pres. Bd. of Trustees, Charles H. Slater, Clk., until noon, June 27, for the wrecking of the old and the construction of a new standpipe on brick tower, and for c.-i. riser pipe with connections all complete. Plans, etc., are on file at the office of the Village Clerk and at the office of George Cadogan and Arthur M. Morgan, Engrs., 160 West Jackson Boulevard, Chicago, Ill.

HEYWORTH, ILL.—Plans are being prepared by Mellinsk & Broyhill, Bloomington, Ill., for the construction of water-works here. Estimated cost, $13,000.

ARTHUR, ILL.—The city is considering issuing $15,000 of bonds for the installation of a water-works system.

CANTON, ILL.—The city has decided to purchase a 2,000,000-gallon pump and an 800-ft. compressor. Joseph Waugh is City Clk.

VIRDEN, ILL.—The city has decided to install a water-works system.

MENDOTA, ILL.—Bids will be received by the City Council until 7.30 p. m., July 3, for the construction of an iron and concrete roof on the reservoir at the water-works plant.

MORRISON, ILL.—Bids will be received by J. A. Riordon, City Atty., until 2 p. m., June 17, for drilling an artesian well, 1,400 ft. deep or more. Separate bids will be received for drilling out the old well.

SPARTA, WIS.—The city is considering laying 1,400 ft. of 10-in., 400 ft. of 8-in., 750 ft. of 6-in., and 1,200 ft. of 4-in. c.-i. water mains. C. H. Gregory is Supt, W.-Wks.

✚MERRILL, WIS.—The contract for furnishing and installing a 2,000,000-gallon triple-expansion, duplex pumping engine for the municipal water-works station has been awarded to the FRED. M. PRESCOTT STEAM PUMP CO., of Milwaukee, Wis.

SUPERIOR, WIS.—The Water, Light & Power Co., of Superior, will make improvements costing $25,000, it is reported, including the construction of a reinforced-concrete addition to the East End pumping station, 40 × 70 ft., and a new reservoir. H. G. Porter, Hazen & Whipple, Consult. Engrs., 103 Park Ave., New York, will have charge of the work in conjunction with W. C. Lounsbury, Supt. W-Wks. Dept. W. H. Winslow is Gen. Mgr.

WORTHINGTON, IOWA.—The city is considering the construction of a new water tank.

✚LEON, IOWA.—Bids for the construction of the water-works system were opened on June 5. The contract for the entire work has been awarded to the DES MOINES BRIDGE & IRON CO., Des Moines, Iowa, at $24,763.

DULUTH, MINN. — The Board of Water and Light Commissioners has recommended purchase by the city of property on Minneapolis Ave. as a site for the construction of a 5,000,000-gallon reservoir next season.

✚LAKE CITY, MINN. — The Board of Water and Light Commissioners has awarded the contract for laying water pipes, hydrants, etc., to FRASER & DANFORTH, of Rochester, Minn. Bids were opened on May 25.

✚MADELIA, MINN.—The contract has been awarded to the DES MOINES BRIDGE & IRON CO., of Des Moines, Iowa, for tank, tower and pipe line extension here, at $7,598. Bids were opened on May 29.

✚MANKATO, MINN. — The contract for furnishing and installing a boiler and pumping station has been awarded by the city to the MANKATO MFG. CO., of Mankato.

ST. CLAIR, MINN.—The citizens, on May 27, voted to issue $5,000 of bonds for the installation of water-works.

✚CALEDONIA, MINN.—The Village Council has awarded the contract for digging a trench for the water mains in Grove St. to ANDREW STOLTZ at $1.35 per rod.

MONTGOMERY, MINN.—Mathias Machacek, New Sprague, Minn., is preparing plans for the construction of a reservoir for the town. J. W. Kaisersatt is City Clerk.

RED WING, MINN.—The city is considering the construction of water mains. A. E. Rhame is City Engr.

✚WASECA, MINN.—The contract for the construction of a water-works system here has been let to PASTORET-LAWRENCE CONTRACTING CO., of Duluth, Minn.

EMPORIA, KAN.—Bids will be received by the City Commissioners at the office of Fred H. Smith, City Clk., until noon, June 21, for making improvements to the water-works system.

AUGUSTA, KAN.—The city has decided to install a new filtration plant for the water-works system. Estimated cost, $12,000.

KANSAS CITY, KAN.—The city is considering extensions to the water-works. H. C. Botsford is City Engr.

✚SENECA, KAN.—HYBSMAN & WILEY, of Seneca, have been awarded the contract for improvements to the water-works system at $15,000. Burns & McDonnell are Engrs., Scarritt Bldg., Kansas City, Mo.

COLUMBUS, NEB.—Bids will be received at the office of the City Clerk until 8 p. m., July 7, for furnishing labor and material for constructing and installing a water-works extension for the city.

MILLARD, NEB.—The city has voted $10,000 of bonds for the construction of a water-works system.

✚BLADEN, NEB.—The contract for furnishing c.-i. pipe and specials has been awarded to the AMERICAN CAST IRON PIPE CO., Kansas City, Mo. The contract for the construction work was let to the INTER-MOUNTAIN BRIDGE & CONSTRUCTION CO., Tecumseh, Neb. Charles Balderston is City Clk., and Charles F. Sturtevant, Holdredge, Neb., is Engr.

HENRY, S. DAK. — The Missouri Valley Engineering Co., Western National Bank Bldg., Mitchell, S. Dak., has been engaged to design and superintend the construction of a water-works system here. Estimated cost, between $10,000 and $12,000.

✚VERMILION, S. DAK.—The Regents of Education have awarded the contract to J. P. CAVANAUGH, Vermilion, for the construction of water-works for the University of South Dakota. Bids were opened on May 23. Fred. W. Ford is Secy.

BEACH, N. DAK.—Bids will be received about July 1 by the city for the construction of water-works. W. Plomason, of Beach, is Engr.

*MANDAN, N. DAK.—All bids received on June 2 by the city for the construction of a water-works system were rejected. New bids will be received until 2 p. m., June 29. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs. For details see advertisement in this issue.

MINOT, N. DAK.—The town is considering the installation of a water-works system. G. Boyer is Chn. Water Comrs.

✚LIBBY, MONT.—The contract, it is reported, has been awarded to the CRANE-ORDWAY CO., of Great Falls, Mont., for material for the new water-works system. Estimated cost, $18,000.

FESTUS, MO.—The Fuller, Coult Co., Chemical Bldg., St. Louis, Mo., Consult. Engrs., have been engaged to prepare plans for the construction of a system of water-works.

CALDWELL, TEX.—The city has voted to issue $6,000 of bonds for the construction of a 16 × 100-ft. steel standpipe.

DALLAS, TEX.—Bids will be received until June 15 by the city for furnishing two 100-HP. boilers for the Elm pumping station.

GALVESTON, TEX.—Bids will be received by the city until noon, June 22 for furnishing a compound Corliss flywheel pump of not less than 4,000,000 gallons per day capacity, at 55 lbs. delivery pressure and capable of giving same delivery at twice the pressure in case of fire. The bids must include all piping, valves, foundations and other material necessary to complete installation. Specifications may be seen at the office of W. D. Masterson, City Supt. of Electricity. John D. Kelly is City Secy.

BROWNSVILLE, TEX.—The La Lomita Irrigation Co., Brownsville, will construct a system of irrigation in the lower valley of the Rio Grande. The incorporators are: James W. Hoyt, Arvid Franke and C. R. Scott.

HENRIETTA, TEX.—The City Council has taken preliminary steps toward the development of a water supply. A dam will be constructed and a lake created.

ROGERS, TEX.—The town has issued $14,000 of bonds for constructing a pipe line from Lake Leahrick to Little River in order to increase the municipal water supply.

PAWHUSKA, OKLA.—The city is considering plans for the extension of the water-works system.

SAPULPA, OKLA.—The City Commissioners have engaged Burns & McDonnell Consult. Engrs., Scarritt Bldg., Kansas City, Mo., to prepare plans and supervise the construction of a flow line and reservoir from the deep wells on Euchee Creek.

WELEETKA, OKLA. — Bids will be received about July 1, by the town, for constructing a water-works system and electric light plant. W. M. Bell is Chn, Water and Light. Com.

ADA, OKLA.—Bids will be received by W. B. Jones, City Clk., until June 19, for valves, hydrants and c.-i. pipe. Goodwin & Harper are Engrs., Scarritt Bldg., Kansas City, Mo.

DENVER, COLO. — The Denver Union Water Co. is planning to improve the water supply of South Denver by constructing a pumping station at Jewell Ave. and University St., the work to be done by the company's forces.

*GRAND VALLEY, COLO.—Bids will be received at the office of the Field, Fellows & Hinderlider Engineering Co., Denver, Colo., until 2 p. m., June 26, for the excavation of canals and the construction of headworks, wood-stave pipe flumes, pumping machinery, etc., for the Grand Valley Irrigation District at Grand Valley. This work involves the expenditure of more than $150,000. Plans, specifications and other particulars may be obtained at the office of Field, Fellows & Hinderlider Engineering Co., 435 Century Bldg., Denver.

GREELEY, COLO.—The contract has been awarded to FOSTER & DOLL, of Denver, Colo., for the concrete and iron work for filtration basin No. 3 at the city water-works, at $7,565. Bids were opened on May 23.

COEUR D'ALENE, IDAHO.—The Council has granted a franchise to the Bayview Townsite & Water Co., of Bayview, to install a water system here.

PRICE, UTAH.—The citizens have voted to issue bonds for $15,000 for extending the water-works system and other improvements.

SANTAQUIN, UTAH. — The citizens have voted to issue bonds for the installation of a water-works system.

✚AZTEC, N. MEX.—The contract for the Aztec irrigation ditch, five miles long, has been awarded to LOFTUS & SKIDMORE, of Denver, Colo.

FARMINGTON, N. MEX.—G. N. Houston, 409 Equitable Bldg., Denver, Colo., is preparing plans for the construction of the proposed water-works system. Estimated cost, about $40,000. Bids for construction will be asked about July 1.

SANTA FE, N. MEX.—Charles D. Miller, Territorial Engr., Phoenix, has approved the application of A. A. Jones for water rights for a proposed system of irrigation in Guadalupe County.

LEWISTON, IDAHO.—The city has decided to lay 1,375 ft. of 4-in. pipe for extensions to the water system.

PARKER, ARIZ.—The plans of the Chuckawalla Development Co. for the irrigation of 250,000 acres of land in the Palo Verde by pumping water from the Colorado River to levels 300 ft. or more high have been approved by the Secretary of War. The work is to be done under the supervision of Lieut. Charles T. Leeds, Corps Engrs., U. S. A., Ft. Bayard, N. Mex.

✚PHOENIX, ARIZ.—The Secretary of the Interior has awarded the contract to CHARLES A. HASKIN, Boston, Mass., for furnishing the compressed-air plant for use in the siphon under the Colorado River, Yuma Project, Ariz.

✚TACOMA, WASH. — The Council has awarded the contract to P. E. McHUGH, of Tacoma, for the construction of the fourth unit of the Green River gravity pipe line at $402,000.

CHICO, CAL.—Bids will be received by the Board of Trustees until 8 p. m., June 20, for performing the work and furnishing material for the construction and erection of a reinforced-concrete cistern of a capacity of about 25,000 gallons, to be located near First and Sycamore Sts. B. F. Hudspeth is Clk.

SANTA BARBARA, CAL.—The Sisquoc Investment Co. is considering laying a pipe line to irrigate Sisquoc Ranch. About 15,000 ft. of 30 and 36-in. c.-i. pipe will be required. Estimated cost, $30,000.

TURLOCK, CAL.—Bids will be received until 2 p. m., June 26, by the Board of Directors of the Turlock Irrigation District, Turlock, addressed to A. Sorenson, Secy., for the construction and completion of the proposed change in Turlock main canal known as the "Waite Cut-off." Specifications are on file at the office of the Board at Turlock.

✚BAKER CITY, ORE.—The City Council has awarded the contract to PARROTT BROS. for the construction of a 3,000,000-gallon reservoir.

*MONTREAL, QUE.—Bids will be received by the Board of Commissioners, L. N. Senecal, Secy., until noon, July 13, for final filters and appurtenances. These bids will be for constructing the final filters and appurtenances, forming a portion of the filtration plant of the city. The whole work is to be in accordance with the plans and specifications on file in the office of the Chief Engineer of Public Works of Montreal, and in the office of Hering & Fuller, Consult. Engrs., 170 Broadway, New York, from whom copies may be obtained upon depositing $25. The final filters are to be of concrete masonry, having a net filtering area of about six acres and a height of 20 to 25 ft. They will be provided with a system of vitrified pipe underdrains, one foot of graded gravel and two feet and three inches of filter sand. Electrically operated machines for cleaning the filters, apparatus for heating and ventilating them, and c.-i. piping and valves for conveying and controlling the water are to be furnished. The date for completion of the works is Sept. 1, 1913. For further details see advertisement in this issue. Noted on June 8.

LONDON, ONT.—Plans have been prepared by F. W. Farncomb, of London, for the construction of a new deep-well water-works system. Estimated cost, $35,000. The work will embrace about 13,000 ft. of 8, 6 and 4-in. c.-i. pipe, 35 hydrants, valves, etc., and a 40,000-gallon steel tank, elevated 100 ft. to bottom.

✚TORONTO, ONT. — The contract was awarded on May 26 by the Board of Control to the CANADA FOUNDRY CO. for supplying water pipe for the new intake, at $17.75 per ft.

OLDS, ALTA.—The city has decided to construct a water-works system. Estimated cost, $30,000. R. L. Earl is Secy-Treas.

✚STRATHCONA, ALTA.—The City Council has awarded the contract, it is reported, to the MANLEY CONSTRUCTION CO., of Edmonton, Alta, for excavating for the extensions to the water and sewer lines, at $41,848, including the extensions of a trunk sewer and laterals in the east end.

ESTEVAN, SASK.—The citizens, on June 2, voted in favor of issuing $5,000 of bonds for the extension of the water-works. Chipman & Powers, Toronto, Ont., are Engrs.

MOOSE JAW, SASK. — Bids will be received until June 19 by W. F. Heal, City Clk., for water and sewer extensions per Contracts Nos. 36, 37, 38 and 39. J. W. Wilson is City Engr.

BATTLEFORD, SASK.—Bids will be received by the Town Council until noon, June 19, for furnishing the material and constructing a water-works and sewerage system.

VANCOUVER, B. C.—Bids were received as follows on May 31 by William McQueen, City Clk., for the supply of a quantity of steel and c.-i. pipe; and for 18-in. flexible joint c.-i. pipe: MACDONALD, GODSON CO., Ltd., of Barnet, B. C., $283,228 (awarded contract); Clayton Son & Co., $340,936; McDougall-Jenkins, Engineers, Ltd., $397,130; John Coughlan & Sons, $326,589; C. Gardner, Johnson & Co., $317,060; Balfour, Guthrie & Co., $298,269; John Coates & Co., $305,798; Drummond, McCall & Co., $300,085, $359,370 and $323,015, W. Beverley Robinson, $313,276; Robertson Godson Co., $318,230; Canadian Boring Co., Ltd., $329,010; C. Gardner Johnson & Co., $306,921; Frank Darling & Co., $350,153; Clayton Sons & Co., $367,027, Evans, Coleman & Evans, Ltd., $381,244.

## SEWERS.

*(*Denotes that this work is advertised in Engineering News.)*

NEWBURYPORT, MASS.—It is reported that this city contemplates constructing 1,800 ft. of 6-in. Akron sewer pipe in various streets and 2,000 ft. of 24-in. culverts. The city will do the work. J. H. Johnston is City Engr.

*WOONSOCKET, R. I.—Bids will be received until 4 p. m., June 27, by the Board of Sewer Commissioners, City Hall, for constructing about 900 ft. of 8-in. sanitary sewer and appurtenances and about 500 ft. of surface water drain. Frank H. Mills is City Engr. For details, see advertisement in this issue.

✚DANIELSON, CONN.—The contract for laying 1,700 ft. of 12-in. vitrified pipe sewer in Mechanic St. has been awarded to F. A. DAVIS, at $1.74 per ft.

*SOUTH NORWALK, CONN.—Bids are asked until June 25 for laying 925 lin. ft. of 18-in. and 750 lin. ft. of 12-in. vitrified sewer, with appurtenances. Maximum cut, 19 ft. Samuel W. Hoyt, Jr., is City Engr.

✚BUFFALO, N. Y.—The City Council has ordered the construction of sewers as follows, the Commissioners of Public Works to advertise for bids: In Cable St., between Buffalo River and 1,430 ft. south of Clinton Sts., 10-in. tile; in Spann St. (both sides of street), between Clinton and Casimir Sts., 10 and 12-in. tile; in Fredro St. (both sides of street), between Clinton and Casimir Sts., 10-in. and 12-in. tile; also that contract be placed with the FRONTIER CONTRACTING CO. for construction of 10-in tile sewer in Prairie Ave., between Tonawanda St. and the southwestern end of the street.

*HEMPSTEAD, N. Y.—Bids will be received until noon, June 27, by the Board of Trustees for constructing sewers and their appurtenances for the Village of Hempstead, the outfall sewer, pumping plants and appurtenances and sewage disposal plant and appurtenances. The engineer's estimate of the work to be done is approximately as follows: 96,800 cu. yds. excavation 6 ft. to 8 ft., 18,500 cu. yds. excavation 8 ft. to 14 ft., 200 cu. yds. excavation 14 ft. and over, 86,600 lin. ft. 8-in. vitrified pipe, 16,700 lin. ft. 10-in. vitrified pipe, 10,700 lin. ft. 12-in. vitrified pipe, 770 lin. ft. 15-in. vitrified pipe, 1,500 lin. ft. 18-in. vitrified pipe, 7,650 lin. ft. 20-in. vitrified pipe, 30 lin. ft. 8-in. c.-i. pipe, 60 lin. ft. 10-in. c.-i. pipe, 1,850 lin. ft. 12-in. c.-i. pipe, 30 lin. ft. 18-in. c.-i. pipe, 3,000 vertical ft. concrete manholes, 113 flush tanks, 445 manhole covers, 18,000 lin. ft. 6-in. vitrified pipe for house service, 12,500 cu. yds. excavation for house service, two pumping plants and appurtenances, one disposal plant and appurtenances. Marcus O. Hedges is Clk. Cyril E. Marshall is Engr.

NEW YORK, N. Y.—Bids will be received by Alfred E. Steers, Pres. Boro. of Brooklyn, until June 21, for furnishing all the labor and material required for constructing sewers in 16th Ave., between 45th and 47th Sts., and between 48th and 52d Sts.; for furnishing all the labor and material required for constructing a sewer in 15th Ave., between Benson Ave. and 86th St.; for furnishing all the labor and material required for constructing a sewer in Howard Pl., between Windsor Pl. and Prospect Ave.; for furnishing all the labor and material required for constructing sewer in 13th Ave., between 58th and 59th Sts.; for furnishing all the labor and material required for constructing sewer basins at the northeast and southeast corners of Rutland Rd. and Rogers Ave., and for furnishing all the labor and material required for constructing a sewer basin at the southerly corner of 14th Ave. and 51st St.

NEW YORK, N. Y.—Bids will be received until June 26 by Michael J. Drummond, Comr. Dept. of Public Charities, foot of East 26th St., for furnishing all the labor and materials required to lay new sewer and steam lines for the new Nurses' Home on Randalls Island, New York.

*ENGLEWOOD, N. J.—The following bids were received at the office of the Englewood Sewerage Co. on June 3 for the complete construction of a sewage disposal works: P. H. Hennesy, Mt. Vernon, $10,519; Cement Paving & Construction Co., Jersey City, N. J., $14,995; ATLANTIC CONSTRUCTION & SUPPLY CO., Atlantic City, N. J., $16,227 (awarded contract); W. G. Broadhurst, Hackensack, N. J., $16,370; Hard & Worm, New York, $17,513; F. R. Long, Hackensack, N. J., $19,197; J. W. Heller, Newark, N. J., $20,545; Lewis & Perkins, New York, $23,325; Ind. Eng. Co., New York, $24,702; B. H. Brooks Co., New York, $20,137. Plans were prepared by Clyde Potts, 30 Church St., New York.

ELIZABETH, N. J.—Bids will be received until June 16 by the City Council for the construction of a sewer in North Ave., from Newark to Pennsylvania Ave. N. K. Thompson is St. Comr.

*WESTFIELD, N. J.—See item under Streets and Roads.

BALTIMORE, MD.—The following bids were received on Sanitary Contract No. 67, junction sewer at Sewage Pumping Station, opened by the Board of Awards on May 31: M. J. Beach, 809 American

Bldg., Baltimore, Md., $16,957; Ryan & Reilly, 1438 South Penn Sq., Philadelphia, Pa., $20,937; W. H. & C. F. Thompson, 627-628 Law Bldg., Baltimore, Md., $21,668; B. F. Sweeten & Son, Baltimore, Md., $26,197; McCay Engineering Co., 9 East Lexington St., Baltimore, Md., $31,810; Wm. McCarthy & Co., Baltimore, Md., $32,402; David Peoples, 60 Knickerbocker Bldg., Baltimore, Md., $51,559. Calvin W. Hendricks is Ch. Engr.

✚The city awarded contract to B. F. SWEETEN & SONS, 820 South Sharp St., at $87,645, to construct sanitary lateral sewers in District 36A, and to DAVID M. ANDREW CO., Mt. Vernon and 26th Sts., at $27,000, to erect office and laboratory building at Back River below Eastern Ave. Calvin W. Hendrick is Ch. Engr. Sewerage Comn., 904 American Bldg.

✚EASTON, MD.—City awarded contract to JOHN R. JEFFRIES, at $37,000, to construct sewer system. Clyde Potts, 30 Church St., New York, is Engr.; Martin Higgins is Mayor.

FREDERICK, MD.—The city awarded contract to BOND & BATES, Baltimore, Md., to construct 42-in. sewer, brick construction. J. Edward Schell is Mayor.

WASHINGTON, D. C.—Bids were opened June 5 by the Commissioners of the District of Columbia, Washington, D. C., for the construction of sewers. B St. N. W., between 21st and 19th Sts. (1) ordinary excavation, (2) concrete masonry D, (3) vitrified brick masonry, (4) sewer brick masonry, (5) 24-in. sewer: George Hyman, Washington, D. C., (1) $2, (2) $7, (3) $20, (4) $14, (5) $1.50; Warren F. Brenizer Co., Washington, D. C., (1) 70 cts., (2) $6, (3) $20, (4) $13, (5) 97 cts.; W. F. & C. F. Thompson, Washington, D. C., (1) $1.40, (2) $7.50, (3) $22, (4) $15, (5) $1.

Sewers in vicinity of Brookland.—Sewer A, (1) ordinary excavation, (2) sewer brick masonry, (3) 15-in. sewer; Sewer B, (1) ordinary excavation, (2) sewer brick masonry, (3) 15-in. sewer, (4) 10-in. sewer; Sewer C, items same as Sewer B; Sewer D, (1) ordinary excavation, (2) sewer brick masonry, (3) 15-in. sewer, (4) 10-in. sewer, (5) 12-in. sewer: George Hyman, Washington, D. C., Sewer A, (1) 80 cts., (2) $14, (3) 75 cts.; Sewer B, (1) 80 cts., (2) $14, (3) 75 cts., (4) 60 cts.; Sewer C, (1) 80 cts., (2) $14, (3) 75 cts., (4) 60 cts.; Sewer D, (1) 80 cts., (2) $14, (3) 75 cts., (4) 60 cts., (5) 65 cts. Warren F. Brenizer Co., Washington, D. C., Sewer A, (1) 90 cts., (2) $14, (3) 75 cts.; sewer B, (1) 90 cts., (2) $14, (3) 75 cts., (4) 60 cts.; Sewer C, (1) 90 cts., (2) $13, (3) 75 cts., (4) 60 cts.; Sewer D, (1) 90 cts., (2) $13, (3) 75 cts., (4) 60 cts., (5) 65 cts. James A. Coil, Washington, D. C., Sewer A, (1) 48 cts., (2) $13, (3) 62.5 cts.; Sewer B, (1) 48 cts., (2) $13, (3) 62.5 cts., (4) 45 cts.; Sewer C, (1) 48 cts., (2) $13, (3) 62.5 cts., (4) 45 cts.; Sewer D, (1) 55 cts., (2) $13, (3) 62.5 cts., (4) 45 cts., (5) 55 cts. W. H. & C. F. Thompson, Washington, D. C., Sewer A, (1) $1, (2) $16, (3) 55 cts.; Sewer B, (1) $1, (2) $16, (3) 55 cts., (4) 45 cts.; Sewer C, (1) $1, (2) $16, (3) 55 cts., (4) 45 cts.; Sewer D, (1) $1, (2) $16, (3) 55 cts., (4) 45 cts., (5) 50 cts.

Sewer at 19th St. N. W.: (1) excavation, (2) concrete masonry, (3) vitrified brick masonry, (4) sewer brick masonry: Warren F. Brenizer Co., Washington, D. C., (1) 50 cts., (2) $6.50, (3) $19, (4) $13; George Hyman, Washington, D. C., (1) 90 cts., (2) $8.50, (3) $20, (4) $14; W. H. & C. F. Thompson, Washington, D. C., (1) $1.75, (2) $7.50, (3) $22, (4) $16.

Sewers in the vicinity of Tenleytown: Sewer A, (1) excavation, (2) sewer brick masonry, (3) 12-in. sewer, (4) 8-in. sewer; Sewer B, (1) excavation, (2) sewer brick masonry, (3) 8-in. sewer; Sewer C, (1) excavation, (2) sewer brick masonry, (3) 15-in. sewer, (4) 12-in. sewer, (5) 8-in. sewer: George Hyman, Washington, D. C., Sewer A, (1) 75 cts., (2) $14, (3) 60 cts., (4) 50 cts.; Sewer B, (1) 75 cts., (2) $14, (3) 50 cts.; Sewer C, (1) 75 cts., (2) $14, (3) 75 cts., (4) 60 cts., (5) 50 cts. Warren F. Brenizer Co., Washington, D. C., Sewer A, (1) 60 cts., (2) $13, (3) 65 cts., (4) 50 cts.; sewer B, (1) 60 cts., (2) $13, (3) 50 cts.; Sewer C, (1) 60 cts., (2) $13, (3) 75 cts., (4) 65 cts., (5) 50 cts. W. F. & C. F. Thompson, Washington, D. C., Sewer A, (1) $1, (2) $16, (3) 50 cts., (4) 40 cts.; Sewer B, (1) $1, (2) $16, (3) 40 cts.; Sewer C, (1) $1, (2) $16, (3) 55 cts., (4) 50 cts., (5) 40 cts.

Sewers between Potomac River and 21st St.—(1) excavation, (2) concrete masonry B, (3) vitrified brick masonry, (4) sewer brick masonry: George Hyman, (1) $2.50, (2) $8, (3) $20, (4) $14; Warren F. Brenizer Co., Washington, D. C., (1) 70 cts., (2) $6, (3) $20, (4) $13; W. H. & C. F. Thompson, Washington, D. C., (1) $1.50, (2) $7.50, (3) $22, (4) $16.

Sewers in the vicinity of Cleveland Park.—(1) excavation, (2) concrete masonry B, (3) vitrified brick masonry, (4) sewer brick masonry: George Hyman, (1) 60 cts., (2) $7.50, (3) $20, (4) $13; W. H. & C. F. Thompson, Washington, D. C., (1) $1.20, (2) $7.50, (3) $25, (4) $16; Warren F. Brenizer Co., Washington, D. C., (1) 65 cts., (2) $6.25, (3) $20, (4) $13.

Sewers in the vicinity of Rock Creek Valley and Military Road.—(1) excavation, (2) concrete masonry, (3) for hauling arch, (4) sewer brick masonry: George Hyman, Washington, D. C., (1) 70 cts., (2) $9, (3) 30 cts. per lin. ft., (4) $14; W. H. & C. F. Thompson, (1) $1.50, (2) $8.50, (3) 20 cts., (4) $16; Warren F. Brenizer Co., Washington, D. C., (1) 49 cts., (2) $7.75, (3) 35 cts., (4) $13.

PHOEBUS, VA.—The Town Council authorized construction of sewers along Armistead St., from Hope to County Sts., and along Curry St., from County St. to Chesapeake & Ohio Ry. station.

ROANOKE, VA.—Bids will be received by W. L. Craft, City Clk., until noon, June 27, for the construction of sewers in various streets. F. L. Gibboney is City Engr.

AKRON, OHIO.—The City Council has adopted resolutions declaring it necessary to construct sewers in Sibley Alley, from a point 125 ft. from Bartges St. to Campbell St.; in Crosier St., 100 ft. east of Allyn St. to Sherman St.; in Wooster Ave., from East Ave. to the corporation line.

AKRON, OHIO.—Bids will be received by the Board of Control until June 16 for the construction of a main trunk sewer in Glendale Cemetery, from Lock 8 to Willow St.; a storm water sewer in Rider Ave. and Tallmadge Ave., from Wright St. to Cuyahoga Falls Ave.; a storm water sewer in Bishop St., from Willow St. to Douglas St., and a sanitary sewer in Jewett St., from a point 150 ft. north of Buchtel Ave. to Hazel St.

BUCYRUS, OHIO.—Bids will be received until June 30 by the Department of Public Works for the construction of 7,700 lin. ft. of 10 to 20-in. vitrified tile sanitary sewer in Dist. 6; also for 6,700 lin. ft. of 4 and 5-ft. concrete and brick sewer in Dist. 7. F. L. Niederheiser is City Engr.

BUCYRUS, OHIO.—Bids will be received until June 15 by the Department of Public Service for the construction of 2,000 lin. ft. of 8 to 12-in. vitrified pipe storm sewer in Middletown St. F. L. Niederheiser is City Engr.

NILES, OHIO.—Bids will be received until June 16 for the construction of about 3,000 ft. of 10, 8 to 6-in. sewers in Mechanic, Williams, Smith and Chestnut Sts. F. M. Brewer is City Engr.

WILMINGTON, OHIO.—The City Council has retained Riggs & Sherman, Toledo, Ohio, to make necessary surveys and plans for the construction of a sewerage system.

MARION, OHIO.—It is reported that the city contemplates constructing 3,750 lin. ft. of 8 to 10-in. vitrified tile sanitary sewers in Greenwood St. C. M. Tobin is Clk. and P. R. Mears City Engr.

PIQUA, OHIO.—Bids will be received until June 16 by R. D. McClay, Dir. of Pub. Ser., for constructing a sanitary sewer on South Main St., approximate length 4,823 ft., 184 house connections.

MICHIGAN CITY, IND.—The Board of Public Works will receive bids until June 20 for the construction of a district vitrified tile sewer in Franklin St., from Tenth to Warren Sts.

SOUTH BEND, IND.—The Board of Public Works has ordered plans and specifications on which bids will be received for the construction in East 3d St., from Ward's Addition to Mason St.

✚TOLLESTON, IND.—MICHAEL BYRNE, Gary, Ind., has been awarded the contract, at $165,698, for the construction of a sewer system.

DETROIT, MICH.—The Common Council of the City of Detroit at their meeting of June 6 directed the Department of Public Works, J. J. Haarer, Comr., 104 City Hall, to advertise for bids until June 20 for the following lateral sewers: Lateral sewer No. 2226, in alley in block bounded by McClellan and Cooper Aves., Douglas and Murray Sts. Estimated cost per lineal foot, $1.40. Lateral sewer No 2232, in alley in block bounded by Cottage Grove, Krupp, Elsmere and Distell Aves. Estimated cost per lin. ft., $1.25. Lateral sewer No 2235, in alley in block bounded by Wayne and Shelby Sts., Congress and Fort Sts. Estimated cost per lin. ft., $1. Lateral sewer No. 2234, in alley in block bounded by Seneca, Newland, Moffat and Chapin Aves. Estimated cost per lin. ft., $1.40.

APPLETON, WIS.—Bids will be received until June 30 by E. L. Williams, City Clk., for the construction of a sewer on Lawrence St., between Mason and Spruce Sts.

✚KENOSHA, WIS.—The CLEARY-WHITE-NEWMAN CO., which was awarded the general contract for the construction of the brick and concrete trunk sewer and outlet, has sublet the contract for the construction of the concrete outlet to PETER B. GALLOWAY, Racine, Wis. Total cost, $90,000.

MARINETTE, WIS.—The Common Council has voted to appropriate $9,000 for the extension of the trunk sewer from the Northwestern tracks in Currie St. to Minnesota St. It will be of brick, 36 ins. in diameter. J. L. Fisher is Mayor.

WAUSAU, WIS.—Bids will be received until June 22 for the construction of 2,300 ft. of 5-ft. concrete sewer and 1,000 ft. of 30-in. vitrified pipe sewer. B. C. Gowen is City Engr.

COUNCIL BLUFFS, IOWA.—Bids will be received until June 19 by Charles J. Duff for the construction of 650 lin. ft. of 10-in. and 288 lin. ft. of 6-in. sewer in Ave. G; also for 414 lin. ft. of 8-in. and 128 lin. ft. of 6-in. sewer in Cooper Ave.

NEVADA, IOWA.—The City Council of Nevada, Iowa, will receive bids until 7.30 p. m., June 26, for the construction of a sewage disposal plant, consisting of a septic tank and two filters for an outfall sewer consisting of about 3,060 ft. of 15-in. vitrified sewer and 730 ft. of 15-in. concrete sewer on piers with manholes; also for the construction of 1,480 ft. of 12-in., 5,920 ft. of 10-in. and 27,090 ft. of 8-in. vitrified sewers.

✚ALBERT LEA, MINN.—The following bids were opened on June 1 for sewer construction: Moeller Bros., Knierim, Iowa, $19,937; Omaha Const. Co., Omaha, Neb., $19,650; E. T. Webster, St. Paul, Minn., $19,315; J. J. Connolly, St. Paul, Minn., $18,887; ILLSTRUP & OLSON, Minneapolis, Minn. (awarded contract), $14,400; Pasturet-Laurence Co., Duluth, Minn., $15,567. Curb and drainage, Albert Lea Construction Co., $6,655. William Barneck is City Engr.

HUTCHINSON, MINN.—Bids will be received until June 21 by C. K. Goodnow, City Clk., for the construction of a sewer in Washington Ave. I. C. Christlieb is Act. City Engr.

ANOKA, MINN.—Bids will be received at the office of Arthur A. Coswell, Aud. Anoka County, until 10.30 a. m., June 22, for digging and constructing main ditch and branches of judicial ditch No. 1, tile and open work.

MULVANE, KAN.—This city will construct a tile sewer at a cost of $6,000. The city will do the work. S. F. Field is Mayor.

ABERDEEN, S. DAK.—Bids will be received until June 26 by F. W. Raymond, City Audr., for the construction of approximately 1,430 ft. of 8-in. and 430 ft. of 12-in. pipe and five manholes.

OAKLAND, CAL.—Bids will be received until June 17 by the Board of Public Works for the construction of sewers. Frank R. Thompson is City Clk.

MOOSE JAW, SASK.—Bids will be received until June 19 by W. F. Heal, City Clk., for Contract 36, laying of approximately 7,900 lin. ft. of 24-in. trunk sewer. Contract 37, the laying of approximately 16,832 lin. ft. of sanitary sewer of varying sizes, and approximately 19,197 of water main of varying sizes. Plans and specifications may be seen at the City Engineer's office. Contract 38, the supply of approximately 236 lin. ft. of 24-in. c.-i. pipe, 358 lin. ft. of 18-in. c.-i. pipe, 6,787 lin. ft. of 12-in. c.-i. pipe, 4,669 lin. ft. of 10-in. c.-i. pipe, 3,598 lin. ft. of 8-in. c.-i. pipe. 4,905 lin. ft. of 6-in. c.-i. pipe; also special castings. Contract 39, the supply approximately of 6,710 lin. ft. of 24-in. vitrified tile pipe, 526 lin. ft. of 18-in. vitrified tile pipe, 4,582 lin. ft. of 10-in. vitrified tile pipe, 11,506 lin. ft. of 8-in. vitrified tile pipe, 150 lin. ft. of 6-in. vitrified tile pipe; also junctions, bends, etc. J. M. Wilson is City Engr.

BATTLEFORD, SASK.—See item under Water Supply—Irrigation.

### GARBAGE DISPOSAL.

(✚*Denotes a contract awarded.*)

BOSTON, MASS.—New bids will soon be asked, it is reported for the garbage contract for the entire city. Bids in a former call for proposals were opened April 24 and noted April 27.

NEW YORK, N. Y.—Bids will be received by George Cromwell, Pres. Boro. Richmond, until noon, June 20, for furnishing all the labor and materials required for the construction of the building, destructor foundations, chimney base, connecting flues, dust pockets, ventilating ducts and adjuncts for the Clifton Refuse Destructor in the Boro. of Richmond, City of New York.

✚HACKENSACK, N. J.—The Improvement Commission on May 31 awarded the contract for oiling streets to the PENNSYLVANIA & DELAWARE OIL CO., at 1¼ cts. per sq. yd. for 350,000 sq. yds. Total, $4,500.

CINCINNATI, OHIO.—See item under Streets and Roads.

FORT WAYNE, IND.—The City Council has decided, it is reported, to install a garbage incinerating plant.

INDIANAPOLIS, IND.—The Board of Public Works has rejected all bids opened on May 15 for the 5 and 10-year garbage contract. New bids will be received until June 21.

WINNIPEG, MAN.—Bids will be received until June 16 by the Board of Control, it is reported, for furnishing the material and erecting an incinerator in Ward No. 7. M. Peterson is Secy.

### STREETS AND ROADS.

(**Denotes that this work is advertised in Engineering News.*)

HOLYOKE, MASS.—Bids will be received until June 26 by the Board of Public Works for about 5,200 sq. yds. of granite block or brick paving in Railroad, Essex and Jackson Sts.

✚BOSTON, MASS.—The following awards were made for State highways by the State Highway Commission on June 1:

In Town of Bourne.—Awarded to M. J. DENAULT & CO., Lowell, $8,529. Other bidders were Thomas Whelan & Co., Wolleston, $8,673.; Lane Quarry Co., Hingham, $8,733; H. L. Thomas, Middlesex, $9,213; Frank Williams, Boston, $9,832.

In Town of Dennis.—Awarded to WILLIAM SEARS, $3,850.

In Town of Groveland.—Awarded to JAMES E. WATKINS, $7,961. Other bidders: F. J. Mague, West Newton, $10,552; John G. Gaffery, Medford, $11,578; M. L. Camarco, Lee, $12,105; Hul Construction Co., Boston, $12,967.

In Town of Holyoke.—Awarded to H. L. THOMAS, Middleboro, $3,005.

In Town of Ipswich.—Awarded to JAMES E. WATKINS, $5,064.

Harold Parker is Chn. of Comn.

✚The following contracts were awarded on June 6 for constructing 17,000 ft. of gravel road in the Town of Hancock: CROW & WALSH, Pittsfield, Mass., $14,077 (awarded contract); M. L. Camarco, Lee, $14,919; J. W. Polcaro, Pittsfield, $16,347; F. J. Mague, West Newton, $17,541.

Bids will be received by the Department of Public Works until June 19 for constructing granite block pavement and retaining wall in Roxbury St., paving North St., and constructing edgestones and gutters in Hall St.; and until June 20 for granite block paving on Fleet St., and brick block paving in Talbot St., about 30,000 sq. yds.

✚BOSTON, MASS.—The contract for building a macadam roadway in Litchfield St. has been awarded to JOHN J. LANE, at $11,125. The other bidders were: R. J. Young & Co., $11,711; Wm. J. Rafferty Co., $11,818; John McCourt & Co., $11,991; John Kelly & Co., $12,107; Daniel E. Lynch, $13,850.

✚THOMPSONVILLE, CONN.—The contract for repaving and macadamizing Pearl and South Pearl Sts, about 11,000 sq. yds. has been awarded to AMOS D. BRIDGE'S SONS, INC., at 97 cts. per sq. yd.

NEW LONDON, CONN.—The [illegible] issue of $50,000 authorized by the General Assembly has been approved by the voters. This money will be used in laying miles of granolithic sidewalks, the work to be started immediately.

✚ALBANY, N. Y.—The bids received by the Board of Contract and Supply June 5, for street improvements were: [illegible] St., from McCarty Ave. to city line: Mulderry Bros., Albany, $19,178; M. F. Dollard, Albany, $18,900; Stevens & McCammon, Albany, $19,553; John M. Holler, Albany, $21,387. Morris St., from West [illegible] St. to Allen St.: MULDERRY BROS., [illegible] 410 (awarded contract); Stevens & McCammon, $12,212; M. F. Dollard, $11,[illegible]; John M. Holler, $12,427. King Av., from Bradford St. to Central Ave.: JOHN M. HOLLER, $12,275 (awarded contract); F. Dillon, Albany, $12,978; Stevens & McCammon, $12,862. Walter Melius is City Engr.

✚*ALBANY, N. Y.—We are officially advised that bids were received and contracts awarded on June 12 by the State Highway Commission as follows: Voorheesville-New Salem Road No. 948, Albany County, 3.76 miles: J. & T. MURPHY, Cobbleskill, N. Y., for Bermudez, $41,684.

Binghamton-Windsor, Part 3, State Highway No. 5148, Broome Co., 3.68 miles: ANDREW D. YOUNG, Brooklyn, N. Y., $44,026.

Fairhaven-Sterling-Martville, Highway No. 687-A, Cayuga County, .17 miles: Kennedy Construction Co., Albany, $3,523 for Residuum, $3,573 for Bermudez, and $3,[illegible] for Trinidad; Mosier & Summers, Buffalo, $3,431 for Residuum.

Poland Center-Waterboro, State Highway No. 5151, Chautauqua County, 5.20 miles: William McIntyre & Sons, Sharon, Pa., $66,468 for Gilsonite, $65,661 for Residuum, $68,889 for Bermudez, and $68,082 for Trinidad.

Cassadaga-Fredonia, Road No. 938, Chautauqua County, 5.58 miles: JAMES McNAMARA, Dunkirk, N. Y., $72,754 for Residuum.

Fitch Bridge-Elmira, Chemung County, Road No. 946, 1.98 miles: COUGH[illegible] LOWMAN & BRADLEY, Watkins, N. Y., $20,759.

Mooers Village, Road No. 930, Clinton County, .32 miles: Spellman-Oliver Co., Chateaugay, $3,795 for Residuum, $3,920 for Bermudez, and $3,920 for Trinidad; Kennedy Construction Co., Albany, $3,723, $3,873, and $3,823.

Truxton-De Ruyter, Part 1, State Highway No. 5141, Cortland County, 2.15 miles: S. P. HULL, Cortland, N. Y., $23,568 for Residuum.

Hyde Park-Staatsburg, State Highway No. 5153, Dutchess County, 5.22 miles; HARRY B. SPROUL, Peekskill, N. Y., $52,890 for Residuum.

Fishkill Village-Wappinger Falls, Road No. 5154, Dutchess County, 4.81 miles: SCHUNNEMUNK CONSTRUCTION CO., Highland Mills, N. Y., $46,950 for Residuum.

Peekskill-Fishkill, Part 5, State Highway No. 5150, Dutchess County, 3.66 miles: HARVEY B. SPROUL, Peekskill, N. Y., $39,641 for Residuum.

Wales Center-Wales, Road No. 924, Erie County, 6.03 miles: Busch & Percival, Buffalo, $66,000 for Residuum, $70,000 for Bermudez, and $69,000 for Trinidad.

Jameson-East Elma, Road No. 925, Erie County, 5.40 miles: BUSCH & PERCIVAL, Buffalo, $47,989.

Saranac Village-Bloomingdale Village, Essex County, Road No. 929, 1.44 miles; John B. Dower, Ballston Spa, $20,000 for Residuum, $20,700 for Bermudez, and $20,700 for Trinidad.

Stafford-LeRoy, Genesee County, Road No. 5136, 2.89 miles: THOMAS GRADY & CO., Rochester, N. Y., $25,700 for Residuum.

East Creek, Road No. 5159, Herkimer County, .14 miles: STATE HIGHWAY CONSTRUCTION CO., Albany, $5,555 for Residuum.

Felts Mills, Road No. 5152, Jefferson County, .29 miles: BURNS BROS. & HALEY, Watertown, N. Y., $7,267 for Residuum.

Copenhagen, Road No. 937, Lewis County, 3.83 miles: ST. REGIS CONSTRUCTION CO., Malone, N. Y., $40,940 for Residuum.

Lima-East Bloomfield, Part 1, Road No. 5142, Livingston County, 5.05 miles: FRANK L. COHEN, Buffalo, $41,000 for Residuum.

Canastota Village, Road No. 908, Madison County, 2.07 miles: R. W. UNISON, Geneva, $53,121 for Bermudez.

Schenectady County Line-Scotch Bush, Montgomery County, Road No. 943, 1.38 miles: JOHN ALLEN, Schenectady, $14,111 for Residuum.

Lockport-Gowanda Creek, Road No. 749, Niagara County, 10.30 miles: BROOKS & JULIAN, Rochester, $119,000 for Residuum.

Camden-Taberg, Part 2, Road No. 5139, Oneida County, 7.97 miles: NEWPORT CONSTRUCTION CO., Newport, N. Y., $76,265 for Residuum.

Waterville Village, Road No. 932, Oneida County, 1.20 miles: T. F. SHAUGHNESSY & CO., Albany, $14,300 for Residuum.

Elbridge-Camillus, Part 2, Road No. 5143, Onondaga County, 5.03 miles: DANIEL L. MOTT, Utica, N. Y., $55,790 for Residuum.

East Springfield-Cherry Valley, Road No. 934, Otsego County, 4.88 miles: D. I. SNELL & CO., Canajoharie, $49,436.

Oneonta-Colliers, Part 4, Road No. 5138, Otsego County, 1.36 miles: JOHN & THOMAS MURPHY, Cobbleskill, $16,673 for Bermudez.

Shelter Island, Road No. 910, Suffolk County, 3.81 miles: CLANCY & VAN ALST, Astoria, N. Y., $38,826.

*OLEAN, N. Y.—Bids will be received by the Commissioners of Public Works until 8 p. m., July 5, for the construction of a wire-cut-lug block pavement on concrete foundation in Washington St., from Fourth to 13th Sts. The approximate amount of pavement is 9,800 sq. yds.; of stone curbing, 6,000 lin. ft.

Bids will be received until 8 p. m., July 6 for the construction of a wire-cut-lug block pavement on concrete foundation in South Third St., from State to Green Sts. The approximate amount of pavement is 5,000 sq.

yds.; of stone curbing, 3,500 lin. ft. Plans and specifications may be examined, bid sheet procured and any other information obtained at the office of John H. Gaynor, City Engr., City Bldg., Olean.

*NEWBURG, N. Y.—We are officially advised that the bids received on June 5 for paving Grand St. were not opened. The work includes 25,630 sq. yds. paving, 11,500 lin. ft. curbing, 15 catch basins, eight inlet basins, twelve sewer manholes, 25 cu. yds. extra concrete, etc. The date for receiving bids has been postponed until June 19. D. J. Coutant is City Clk.

NEW YORK, N. Y.—The Coney Island & Brooklyn Ry. Co. has a force of surveyors at work on parking Coney Island Ave. The work is estimated at $400,000.

Bids will be received by George Cromwell, Pres. Boro. The Bronx, until 10.30 p. m., June 27, for paving, regulating, grading, etc., portions of various streets.

Bids will be received by Charles B. Stover, Pres. Park Bd., until 3 p. m., June 22, for furnishing all the labor and materials required for reconstructing and surfacing with asphalt earth mixture the Bronx and Pelham Parkway, from the Southern Boulevard to the Butler St. road, in the Borough of The Bronx. Bids were received formerly for this work, as noted in the issue of June 8.

Bids will be received by Alfred E. Steers, Pres. Boro. Brooklyn, until 11 a. m., June 21, for regulating, grading, curbing, paving, etc., portions of various streets.

Bids will be received by George McAneny, Pres. Boro. of Manhattan, until 2 p. m., June 21, for regulating, repaving, grading, curbing, etc., portions of various streets.

SYRACUSE, N. Y.—The lowest bids received by the Board of Contract were as follows: Grading Lincoln Park, Ernest Woods, $5,800. Paving Elliott St., Central City Paving Co., $10,458 for Mack brick or block, $10,183 for Trinidad asphalt, and $8,563 for macadam. Paving Onondaga Ave., Warner Quinlan Asphalt Co., $26,148 for Patton brick or block; $25,458 for Trinidad asphalt.

Bids will be received at the office of the Board of Contract and Supply until 1.30 p. m., June 19, for furnishing materials and constructing a cement sidewalk, five ft. wide, on both sides of Matson Ave., from South Salina St. to Midland Ave. George J. Metz is City Clk.

✚YONKERS, N. Y.—The Board of Contract has awarded to THOMAS GRADY, at $25,500, the contract for paving with granite block Alexander St., between Ashburton and Wells Aves.

NEW YORK, N. Y.—Alfred E. Steers, Pres. Boro. Brooklyn, is considering a plan for the improvement and widening of Kings Highway, Brooklyn. It is proposed to make the highway 100 ft. wide from Ocean Parkway to Flatbush Ave.

NORTH TARRYTOWN, N. Y.—At a special election it was voted to raise $144,000 for paving the streets with brick. William Rockefeller has agreed to give $10,000 toward paving Broadway and will erect a $15,000 Washington Irving Memorial bridge.

✚ROCHESTER, N. Y.—Contracts for paving have been awarded as follows: Goldsmith Pl., Nellis Park, Kenning Alley, Heberling Ave., to WHITMORE, RAUBER & VICINUS, at $13,620; Depew St., ROCHESTER VULCANITE PAVEMENT CO., $14,512; Agnes St., Olean St. W. H. MADDEN, $6,300; Hoffner St., F. C. LAUER & SONS CO., $4,080; St. Paul St., JULIUS FRIEDRICH CO., $32,956.

TROY, N. Y.—Bids for regulating, curbing, grading and paving Collins Ave., from Pawling to Maple Ave., have been received by the Board of Contract & Supply, as follows: For bituminous concrete pavement: John Warnock, $11,106; Warren Bros., $11,915; John H. Gleason, $12,322. For sheet asphalt pavement: oJhn H. Gleason, $12,574. The contract provides for the following: 3,150 sq. yds. of pavement, 2,280 lin. ft. of curb, 40 lin. ft. of old curb reset, three catch basins, six old catch basins repaired. James M. Riley is Secy. of Bd.

*BELMAR, N. J.—Bids will be received by the Common Council until 6 p. m., June 20, for furnishing and laying about 30,000 sq. yds. of creosoted wood block, vitrified brick, asphalithic, or asphalted concrete pavement on F St., from the bridge near Fifth Ave. to 16th Ave. Charles O. Hudnut is Boro. Clk.

✚CAPE MAY C. H., N. J.—We are officially advised that the contract for building 6½ miles of Seashore Road was awarded, on June 6, to FRANK W. MILLER, Cape May C. H., at $24,752. Noted on June 1.

HACKENSACK, N. J.—The bids received by the County Roads Committee for improving three sections of the Franklin Turnpike with asphalt concrete and for macadamizing the road running from Saddle River to Park Ridge were as follows: Franklin Turnpike, first section, George M. Brewster Co., $35,714; H. G. Hering, Jr., & Co., $38,185; G. F. Brackett, $36,735; Francisco Bros., $36,017. Franklin Turnpike, second section, Francisco Bros., $18,602; H. G. Hering, Jr., & Co., $19,622; George M. Brewster Co., $18,392. Franklin Turnpike, third section, Francisco Bros., $53,048; George M. Brewster Co., $52,607; G. F. Brackett, $49,274. Saddle River to Park Ridge road, Ernest Abraham, $22,962; George M. Brewster Co., $23,166; H. G. Hering, Jr., & Co., $24,500.

JERSEY CITY, N. J.—Bids will be received by the Board of Street and Water Commissioners until 2 p. m., June 19, for improving Pamrapo Ave. and repaving ...th and Henderson Sts. The work includes about 51,310 sq. yds. of repaving.

WESTFIELD, N. J.—Bids for improving a section of Mountain Ave. will be received by the Town Council until 8.15 p. m., July ... The engineer's approximate estimate of quantities is as follows: 1,000 cu. yds. of excavation, 3,200 sq. yds. of 8-in. bituminous macadam, 5,500 lin. ft. of underdrain, 425 ft. 8-in. underdrain outlet, 200 lin. ft. 12-in. drain and appurtenances, 165 lin. ft. concrete culverts. Charles Clark is Town Clk.

NEWARK, N. J.—The lowest bids received by the Board of Street and Water Commissioners on May 25 were as follows: Warren St., granite, J. F. Shanley Co., $34,076; Fifth St., brick, Jersey Paving Corporation, $16,580; North 13th St., brick, Jersey Paving Corporation, $7,340; Runyon St., granite, P. & P. Jannarone, $11,627; Concord St., granite, P. & P. Jannarone, $12,467; Clifton St., granite, P. & P. Jannarone, $11,821.

*WILKES-BARRE, PA.—Bids will be received by James M. Norris, County Controller, until 2 p. m., June 22, for repairing with bituminous macadam the Kingston and Dallas Turnpike Road in Kingston Township, a distance of about 10,115 ft., in accordance with the plans and specifications now on file in the office of the Commissioners of Luzerne County and at the office of Young & Wintermute, Engrs., Second National Bank Bldg., Wilkes-Barre.

✚ALTOONA, PA.—The contract for paving various streets has been awarded to the STANDARD BITULITHIC CO., at approximately $132,109. The other bidders were: W. L. Elder Co., Baltimore, Md., sheet asphalt, $163,177; Barber Paving Co., Philadelphia, Pa., sheet asphalt, $115,039. The paving will be bitulithic.

DERRY, PA.—Bids will be received by the Council of the Borough of Derry until 8 p. m., June 16, for the improvement of Chestnut St., North and South, consisting, approximately, of 4,861 cu. yds. of excavating, 9,650 sq. yds. vitrified brick paving, 4,850 lin. ft. combined concrete water-table and curb; 730 lin. ft. stone backing curb. Details can be learned and blanks procured at the office of the Secretary of Derry Borough. J. M. Nicholson is Boro. Clk.

✚GREENSBURG, PA.—Contracts for paving about one mile of streets have been awarded to LUTHER F. EDWARDS, Yardley, Pa., at $22,213. The Hallam Construction Co., Washington, Pa., submitted a bid of $25,274 for this work.

WASHINGTON, PA.—Bids will soon be asked for improving 25 miles of road in Washington County. The roads will be of brick.

✚YORK, PA.—A contract for constructing 5,680 ft. of road in Fawn Township has been awarded by the County Commissioners to THOMAS MEEHAN & SONS, Philadelphia, Pa., at $11,696.

✚WARREN, PA.—The contract for constructing a State Road, 3½ miles long, in Pine Grove Township, has been awarded to the SOUTH SHORE CONSTRUCTION CO., Erie, Pa.

BALTIMORE, MD.—Bids will be received by the Board of Awards, James H. Preston, Pres., until June 21 for paving 26th St. footway, and for furnishing wood-paving block to be used during the year 1911. B. T. Fendall is City Engr.

*HAVRE DE GRACE, MD.—Bids will be received by the Street Improvement Commission until 8 p. m., June 27, for street improvement, to include the following: 5,160 cu. yds. excavation, 8,480 sq. yds. bituminous macadam, 120 cu. yds. masonry. Murray Vandiver is Chn.

WASHINGTON, D. C.—Bids were received by the Commissioners of the District of Columbia on May 23, for furnishing repressed vitrified paving block during the fiscal year ending June 30, 1912, as follows: Proposal A, for furnishing 2,133,000 repressed vitrified paving block, subject to an increase or decrease of one-third; alternate B, 1,600,000 paving blocks, with the right to order any quantity in excess of that named as the needs of the service may require: American Sewer Pipe Co., Akron, Ohio, (A) $21.25, (B) $23.40; alternate (A) $21.25; alternate (B), $23.40. Baltimore Clay Products Co., Baltimore, Md., (A) $21; (B) $21. Allegheny Valley Brick Co., Tarentum, Pa., (A) $19.50; (B) $19.75. Mack Manufacturing Co., Philadelphia, Pa., (A) $22.55; (B) $22.55; alternate (A) $24.80; (B) $24.80. Saxton Vitrified Brick Co., Saxton, Pa., (A) $23.50; (B) $23.50. C. P. Mayer Brick Co., Bridgeville, Pa., (A) $21.40; (B) $21.40; Layton Fire Clay Co., McKeesport, Pa., (A) $21.50; (B) $21.50. William Wirt Clark, Baltimore, Md., (A) $23.90; (b) $23.90.

BUENA VISTA, VA.—Bids will soon be received by J. L. Knight, Chn. Street Com., for constructing one mile of macadam road from Norfolk & Western Ry. culvert to city limits, the road to be 16 ft. wide. Plans and specifications are on file with City Engineer.

RICHMOND, VA.—Bids will be received by P. St. J. Wilson, State Highway Comr., Richmond, and the Board of Supervisors of Wise County, at Wise, Va., until June 28 for grading about 81 miles of county highway, as follows: Section 1, 13.3 miles; section 3, 13.4 miles; section 4, 13 miles; section 5, 15.3 miles; section 9, 9.5 miles; section, 10, 6 miles; section 11, 11 miles. Plans and specifications may be seen at office of State Highway Commission, Richmond, Va., and at the office of the Clerk of Wise, Va., or complete set of maps, plans, etc., may be had on application to County Engineer, Norton, Va., for sum of $1.50 per section.

MOUNDSVILLE, W. VA.—Bids will soon be asked for paving the Gendale Road to the Cockayne line, estimated at $5,000.

PARKERSBURG, W. VA.—Bids will be received by the County Court of Wood County, in the Court House at Parkersburg, until noon, July 3, for furnishing the necessary labor and material and for the permanent improvement by paving with brick certain portions of the public roads of Parkersburg District, about ten miles in all. W. H. McDowell is Pres. County Court, and William Dudley, Clk. C. Skidmore is County Engr.

*WILMINGTON, N. C.—Bids will be received until noon, July 15, by P. Q. Moore, Councilman, Dept. of Streets and Wharves, for paving, grading and curbing Front St. For details, see advertisement in this issue.

JACKSONVILLE, FLA.—Bids will be received by the Board of Public Works until 2.30 p. m., June 21, for grading, curbing and paving with vitrified blocks of some standard brand various city streets. Philip Prioleau is City Engr.

✚KNOXVILLE, TENN.—A contract has been awarded to the BARBER ASPHALT PAVING CO., Philadelphia, Pa., for paving five improvement districts in Knoxville, at $1.78 per sq. yd. for asphalt paving, with 5-in. concrete base, and $1.88 for 6-in. base. The estimated cost of the contract is $85,000.

PARIS, KY.—Bids will be received by C. F. Redmon, Turnpike Superv., Paris, until June 17, for constructing about 2⅛ miles of Silas Pike, 10 miles west of Paris, connecting with Hawkins and Cummins Pike, according to plans, specifications and survey on file at the Court House, Paris.

LOUISVILLE, KY.—Bids have been received for paving 17 streets, at an estimated cost of $93,000. The bids were as follows: Louisville Asphalt Co., $1.90 to $1.98 per sq. yd.; Barber Asphalt Paving Co., $1.93 to $1.98 per sq. yd.; American Standard Asphalt Co., $1.95 to $1.98 per sq. yd.

AKRON, OHIO.—Bids will be received by the Board of Control until June 16 for paving West Exchange St., from Portage Path to the corporation line; Dodge Ave., from Payne Ave. to Exchange St.; Howe St., from Bowery to Moeller St., and Stanton Ave., from Main St. to Sweitzer Ave.

BOWLING GREEN, OHIO.—Bids will be received by the Board of Control until 2 p. m., June 24, for grading, draining, macadamizing and oiling Wallace Ave. W. A. Mariner is Ser. Dir.

CANFIELD, OHIO.—Bids will be received by the Village Council until noon, June 17, for grading and paving with brick on furnace slag foundation, 948 lin. ft. on Broad St., between Main and Court Sts. The work is estimated at $6,232. S. A. Arnold is Clk.

CINCINNATI, OHIO.—Bids will be received by the Board of County Commissioners until noon, July 7, for repairing Indian Hill Ave., from Plainville to Wooster Pike. Stanley Struble is Pres. and Fred Dreihs, Clk.

CINCINNATI, OHIO.—The contract for improving Spring Grove Ave., from Ludlow Ave. to the old corporation line, will probably soon be awarded. The bids received have been referred to F. S. Shipley, City Engr. The Engineer's estimate for the improvement are: Granite, $119,240; wood block, $110,768; bitulithic, $98,628.

✚COLUMBUS, OHIO.—The contract for paving with brick Summit St., from Eleventh Ave. to Mock Road, has been awarded to G. W. PATTERSON, at $63,000. Nelsonville block will be used for the work.

DAYTON, OHIO.—The lowest bids received for paving various streets are as follows: Clover, from Wayne to Filmore, brick with limestone, J. E. Conley, $13,133; berea, $12,967; cement, $12,721. Summit, from Germantown to Third, brick with limestone curb, J. E. Conley, $20,128; with berea, $19,811; with cement, $19,389. Valley, from Brandt to Findlay, W. J. Kernan, $8,981; with cement, $8,826. Valley, from Brandt to M. & E. Canal, W. J. Kernan, $12,163, $12,082, $11,973. River, from Ferguson to Iowa, brick with limestone or berea, John Wroe, $14,527; with cement, W. H. Boyd, $13,936.

HAMLER, OHIO.—Bids will be received by the Village Council until noon, June 17, for furnishing the necessary labor and materials for the improvement of Belton St. by grading, curbing and paving, according to plans and specifications on file in the office of the Council, Geo. Johnson, Clk.

PAINESVILLE, OHIO.—Bids will be received by L. A. Thorp, Dir. Pub Ser., until noon, June 20, for repaving Main St., from State St. to the Public Park.

PERRYSBURG, OHIO.—Bids for paving Second St. with brick, from Hickory to Paine St., seven blocks, have been received as follows: Garrigan Bros., Toledo, Ohio, $38,335; M. F. O'Sullivan, Toledo, $40,569; A. A. Reilly, Toledo, $44,204; F. E. McKinney, Toledo, $44,872; D. J. Mulligan, Lima, Ohio, $35,538; Hennessey & Bro., Piqua, Ohio, $37,820; T. S. Saxton Co., Richmond, Ind., $37,820; W. W. Hatch, Detroit, Mich., $39,092.

LORAIN, OHIO.—Bids will be received by L. B. Johnson, Clk. Dir. Pub. Ser., until noon, June 27, for paving various streets.

ROCKY RIVER, OHIO.—Bids will be received by W. M. Dean, Town Clk., until noon, June 23, for constructing cement walks on North Ridge Road in accordance with the form of contract, plans and specifications on file at the office of the Wm. H. Evers Engineering Co., 332-334 The Arcade, Cleveland, Ohio.

SEBRING, OHIO.—Bonds for $33,000 have been sold by Smith Township for improving the Sebring-Beloit Road.

TOLEDO, OHIO.—Bids will be received by Fred Shane, Secy. Dir. Pub. Ser., until noon, June 19, for laying and repairing sidewalks for the coming year.

YOUNGSTOWN, OHIO.—Bids will be received by R. L. Freudenberger, Clk. Dir. Pub. Ser., until noon, June 19, for grading, paving and curbing Railroad Ave., from Hawkins Alley to Garrett Ave., according to the plans and specifications on file in the office of the City Engineer.

YOUNGSTOWN, OHIO.—Bids will be received by the Director of Public Service, W. H. McMillin, Clk., until noon, June 23, for repairing sheet asphalt streets and for paving Myrtle Ave., between South and Glenwood Aves.

DAYTON OHIO.—The lowest bid received for paving Huffman Hill, from Martz to Overlook Ave., was submitted by the J. E. Conley Co., at $38,981.

AKRON, OHIO.—Ordinances have been passed appropriating $125,000 for street improvement and sewer work. oJhn Payne is City Engr., and John Cauthier, Supt. Paving.

CLEVELAND, OHIO.—We are officially advised that the lowest bid received on May 27 for grading, draining and improving Irish Road No. 2, was submitted by Baldwin Bros. at $66,669. Noted on May 11.

✚BRAZIL, IND.—The Commissioners of Clay County have awarded a contract to ALLEN M. SHATTUCK for the construction of the Hendrix gravel road, including a portion of Hendrix St., in Brazil. The road is about three miles long.

✚DELPHI, IND.—The Carroll County Commissioners have awarded a contract for constructing a gravel road to JAMES F. PIERCE, Delphi, at $10,000.

✚GREENCASTLE, IND.—The Commissioners of Putnam County have awarded a contract for the construction of the Webster gravel road, 10,616 ft. in length, and the Carrigan gravel road, about two miles in length, to JAMES F. CARRAN, at $8,472 and $7,820, respectively.

JASONVILLE, IND.—Bids will be received by the Board of Trustees until 4 p. m., June 19, for paving Meridian St. with brick, with concrete curbing and foundation. Ira Rogers is Town Clk.

✚KOKOMO, IND.—We are officially advised that the contract for constructing two gravel roads was awarded, on June 6, to SILAS SPROAL, at $14,201.

✚RUSHVILLE, IND.—The contract for constructing the Beckner Road has been awarded to WILK & CO., at $8,700.

✚SALEM, IND.—ELWOOD JOHNSON, Orleans, Ind., has been awarded the contract for constructing a road in Washington County, at $10,190.

✚WABASH, IND.—Contracts for road construction have been awarded as follows: H. B. STARK & CO., Bluffton, Creager road, three miles, gravel, $5,689; Creager road, three miles, stone, $8,750. D. P. BROOKS, W. H. Miller road, stone, $2,690. F. O. NORTH, Murphy road, stone, $10,349. GEORGE M. SEWELL, Noble Township, gravel, $7,400. FRED A. GROVER & CO., Logansport, Tyner road, between Waltz and Liberty and Noble Townships, stone and gravel, $10,738.

GRAND RAPIDS, MICH.—The lowest bids received for paving are as follows: Fountain St., creosoted block, Carpenter & Anderson, $10,129; asphalt macadam, E. W. Seeman, $6,993. Clancy St., Westrumite, C. E. Williams, $9,295; asphalt macadam, E. W. Seeman, $9,193.

MONROE, MICH.—Resolutions to pave Washington and North Macomb Sts. have been passed. The work consists of about 11,000 sq. yds. of concrete pavement, estimated to cost $18,000. Bids will be asked in about six weeks. Jesse M. White is Engr. and Fred M. Kressback City Clk.

✚DETROIT, MICH.—Contracts for paving with cedar block on concrete foundation have been awarded as follows: To F. PORATH & Sons, Penobscot Bldg., Willis Ave., from Hastings to Russell, at $7,948; 24th St., from Fort to Howard St., $4,607; 24th St., from Porter to Baker St., $4,293; to JULIUS PORATH, McGraw Bldg., Buchanan St., from 14th St. to railroad tracks, $14,255; Provard St., from Elliot to Canfield St., $11,535; Madison Ave., from Brush to Beaubien St., $1,581; to J. S. AFFELD, 761 Campbell Ave., 21st St., from Fort to Baker St., at $11,668; to J. A. MERCIER, Hammond Bldg., Plumb St., from Second to Fifth Ave., at $4,595; Bethune Ave., from Woodward Ave. to Beaubien St., at $8,062; to THOS. E. CURRIE, McGraw Bldg., Orleans St., Sections 1 and 2, at $18,000; Waterloo St., from east end to Joseph Campau Ave., at $12,076.

Bids will soon be asked for paving five alleys, at a cost of $30,000.

Preliminary plans have been prepared for paving, to be done after July 1, at a cost of about $40,000. J. J. Haarer is Comr. of Pub. Wks.

✚GILMAN, ILL.—The contract for paving Central St. has been awarded by the Local Board of Improvement to G. W. PRUTSMAN, Danville, Ill., at $11,204.

ANTIGO, WIS.—Bids for paving Clermont St., from First to Fourth Ave., with Westrumite asphalt, have been received as follows: Central Westrumite Co., $10,117; W. A. Stewart, $10,722. The contract will not be awarded until June 15.

✚HARLAN, IOWA.—We are officially advised that the contract for constructing 12,900 sq. yds. of pavement was awarded on June 5 to G. MANCINI, at $15,567. The other bidders were: C. H. Atkinson, $16,665; J. A. Beebe, $16,680; McMakin & Son, $16,768; Lana Construction Co., $18,711.

SHENANDOAH, IOWA.—We are officially advised that this city will construct 24,000 sq. yds. of asphaltic concrete paving this summer. F. L. Cain is City Engr.

*MAQUOKETA, IOWA.—Bids will be received by E. J. Kullmer, City Clk., until noon, June 26, for brick blocks, creosote block, and asphaltic concrete paving.

GREENFIELD, IOWA.—Bids will be received until 2.30 p. m., July 11, for constructing 14,000 sq. yds. of brick or cement concrete pavement, and 4,500 lin. ft. of curb. The Iowa Engineering Co., Chase Block, Clinton, Iowa, are Engrs.

ALBERT LEA, MINN.—Bids will be received until 5 p. m., June 19, for constructing 32,280 sq. yds. of pavement. Bids are asked on creosoted wood block, vitrified brick, mineral rubber, bitulithic, sandstone or concrete. Wm. Barnick is City Engr.

GALVESTON, TEX.—Bids will be received by John M. Murch, County Audr., until 11 a. m., June 19, for regrading, building culverts, etc., and resurfacing the county road from causeway approach at Virginia Point to Texas City Junction and Highland Bayou according to plans and specifications on file with County Auditor.

DAYTON, TEX.—The taxpayers of the precinct have voted to issue $275,000 of bonds for the construction of roads. In the Liberty Precinct of the county an issue of $250,000 has lately been voted.

MARLIN, TEX.—Bids will be received and contracts awarded in about 60 days for street paving. Estimated cost, $15,000.

SALT LAKE CITY, UTAH.—We are officially advised that the lowest bids received on June 2 for constructing curbs and gutters in Extension No. 16 were as follows: Gillis Contracting Co., $5,970; A. A. Clark, $6,540; P. J. Moran, $12,357. On June 7, for constructing sidewalks in Extension No. 129, McKay & Reed, $86,181.

✚TACOMA, WASH.—The contract for paving Carr St. and others has been awarded to the KEASAL CONSTRUCTION CO., at $59,471.

PORTLAND, ORE.—The Brooklyn Street Improvement District has been formed, embracing a number of connecting streets. Bitulithic pavement is to be laid at an estimated cost of $91,330.

GRANTS PASS, ORE.—Pavements, concrete curb, gutters and sidewalks will be constructed here at a cost of $120,000; also about two miles of waterbound macadam, 30-ft. roadway, with concrete curb, gutter and sidewalks. F. E. Hobson is City Engr.

HILLSBORO, ORE.—Mayor William A. Brewer, of Hillsboro, has mapped out a plan for improving eight miles of the city streets at a cost of $75,000. Engineers are now at work upon plans and specifications for the work. The streets will be paved with either asphalt or macadam.

✚LOS ANGELES, CAL.—The Board of Public Works has awarded a contract to FAIRCHILD-GILMORE-WILTON CO., at $24,335 for improving Alvarado St., between Oceanview Ave. and Seventh St.

✚LOS ANGELES, CAL.—The Santa Fe R. R. Co. has awarded a contract to the L. J. SMITH CONTRACTING CO. for constructing a 6-mile scenic drive on the rim of the Grand Canyon of the Colorado River in Arizona.

✚LOS ANGELES, CAL.—The Board of Supervisors have awarded a contract to BENT & PENNEBAKER for macadamizing a portion of Harbor Boulevard, a distance of five miles, at $44,582, and to PETE WALKER for constructing a portion of Foothill Boulevard, at $7,391, and for building a 1.35-mile section of the valley road at $7,430.

SACRAMENTO, CAL.—Bids will be received at the office of N. Ellery, State Engr., Capitol Bldg., Sacramento, until noon, June 28, for the construction of 14 miles of the Trinity State Highway, in accordance with the plans and specifications therefor, copies of which may be obtained on application to the State Department of Engineering, Sacramento.

SAN BERNARDINO, CAL.—Press reports state that the Board of City Trustees have decided to pave Huntington Drive, Fair Oaks Ave., Pasadena Ave., Mission St., Monterey Road and Fremont Ave., at a cost of $325,000. J. G. Sloan is City Engr.

✚LOS ANGELES, CAL.—The Board of Public Works has awarded a contract to WALTER OVERELL, for improving Micheltorena St., at $3.90 per lin. ft. for grading and graveling, 35 cts. per lin. ft. for cement curb, 16 cts. per sq. ft. for cement gutter, 33 cts. per sq. ft. for vitrified block gutter. Total bid, $12,980.

MONTREAL, QUE.—Bids will be received by the Board of Commissioners, L. N. Senecal, Secy., until noon, June 15, for constructing pavements and laying sidewalks, as ordered.

QUEBEC, QUE.—A contract for paving various streets with asphalt has been awarded to FALARDEAU & CO., at $147,000.

KINGSTON, ONT.—Bids will be received by the Board of Works until noon, June 24, for the construction of 15,000 sq. yds. of asphaltic macadam, and 9,700 lin. ft. of curb and gutter. H. B. R. Craig is City Engr.

✚GUELPH, ONT.—The CONCRETE CONSTRUCTION CO., Guelph, have been awarded the contract for constructing block pavement at $18,701.

✚MOOSE JAW, SASK.—We are officially advised that contracts were awarded on May 29 for constructing 206,061 sq. ft. concrete sidewalk and 41,093 sq. yds. of pavement to the MOOSE JAW PAVING CORPORATION, at $55,430 and $127,906, respectively. W. F. Heal is City Clk. and J. M. Wilson City Engr.

## MANUFACTURING PLANTS.

(✚*Denotes a contract awarded.*)

BREWER, ME.—The Peavey Mfg. Co., successor to the Bangor Edge Tool Co., is about to move to Brewer from Bangor. The new concern has bought a lot near the railroad station in Brewer, and will erect a concrete factory for the manufacture of cant-dogs, axes and edged tools. The main building will be 100 × 50 ft., with a wing 50 × 50 ft. The output of the Peavey factory on the start will be 30,000 to 40,000 cant-dogs and 1,000 dozens axes annually, it is stated.

BELFAST, ME.—Incorporation papers have been filed by the Belfast Building Co., capitalized at $50,000 to purchase the Belfast Shoe Factory, build a wing thereto, and make other improvements in the building.

✚CAMBRIDGE, MASS.—The contract to erect the printing plant for the Alden Spear Co. on Sixth St. has been awarded to H. WALES LINES CO., of Meriden, Conn. It will be of reinforced concrete, two stories high, 105 × 48 ft. French & Hubbard, of Boston, are the Archs. Cost, $20,000.

✚SPRINGFIELD, MASS.—The contract to erect an addition to the factory of the Bay State Thread Co. has been awarded to JOS. E. ROY. It is to be 40 × 54 ft., two stories high, of brick construction.

BRIDGEPORT, CONN.—Official advices are to the effect that the Artistic Bronze Co., of South Norwalk, Conn., is preparing plans for the erection of a factory in Bridgeport, costing about $10,000. Howard B. Close, Engr. for the company, will begin taking figures on mason work, carpentry, gravel roofing, etc., about June 19.

BRISTOL, CONN.—The New Departure Mfg. Co. will construct an addition to its plant on North Main St. The building will be of brick, 30 × 80 ft., and two stories high.

HARTFORD, CONN.—The Veeder Mfg. Co. has been granted a permit to construct a steel and concrete factory, four stories high, 74 × 40 ft., on Sargenat St.

HARTFORD, CONN. — The Terry Steam Turbine Co. is to build a large addition to their shop at Hartford in order to meet the increasing demand for the Terry turbine, which is being extensively used for driving centrifugal pumps, generators, fans, etc. The new part will more than double the capacity of the present plant and will be added to the eastern end of the shop, which was completed two and a half years ago. The plans are completed and bids have been called for so that the construction may be begun as soon as possible.

✚HARTFORD, CONN.—The general contract for the erection of the 4-story brick addition to the plant, 50 × 310 ft., of the Royal Typewriter Co. on New Park Ave., has been awarded to the B. H. HIBBARD CO., of New Britain. George B. Allen, Hartford, is the Engr. Noted May 18.

HARTFORD, CONN.—The Underwood Typewriter Co. is planning the erection of another factory building at its plant on Capitol Ave. The proposed building will be of brick, mill construction, 50 × 200 ft. and six stories high. Two hydraulic elevators will be installed.

HARTFORD, CONN.—Ford, Buck & Sheldon, Inc., Engrs., 60 Prospect St., are preparing plans for an addition which will double the capacity of the plant of the Terry Steam Turbine Co., on Windsor Ave. The building will be one story high, 80 × 800 ft., with monitor roof.

BRIDGEPORT, CONN.—The Fletcher Engineering Co., of this city, has completed plans for the factory buildings of the Baird Machine Co. The buildings to be erected include a 2-story office building, a 1-story machine shop with gallery, power-house, pattern shop and storehouse. All will be of brick and steel construction.

✚The general contract for a 3-story and basement building, 54 × 95 ft., of brick, mill construction at the plant of the Connecticut Clasp Co. on Railroad Ave., has been awarded to the S. W. HUBBELL BUILDING CO.

Plans have been completed for the factory building to be erected by the Bridgeport Screw Co. on the tract of land bounded by Central and Union Aves., and Williston St. The company will manufacture wood and machine screws. W. M. Farrell, Newfield Bldg., is Pres. and Gen. Mgr. of the company.

NEW HAVEN, CONN.—Estimates are now being received on the plans of F. L. Smith, Arch., 5 Beekman St., New York, for a building at the plant of the New Haven Pulp & Board Co. on Railroad Ave. It will be a 4-story structure, of brick and concrete, 67 × 131 ft.

NEW HAVEN, CONN.—Plans are being prepared by R. W. Foote, Arch., Malley Bldg., for an addition to the plant of the H. B. Ives Co., on Artizan St. It will be of brick, mill construction, 40 × 100 ft., and four stories high.

✚SHELTON, CONN.—The general contract for a 2-story addition, 100 × 390 ft., of brick, with steel frame and blue stone trimmings, to the plant of the R. N. Bassett Co. on Bridge St., has been awarded to the TRACY BROS. CO., 32 Benedict St., Waterbury, Conn. G. G. Riggs, Manhan St., Waterbury, will do the concrete work. The present building, which is four stories high, will be raised two stories and additions built on. New elevators will be installed. Frederick R. Warren, 103 Park Ave., New York, is the Arch.

STAMFORD, CONN.—From plans drawn by C. F. Allbrecht, Arch., of Darien, Conn., the VERONA CONSTRUCTION CO., of this city, has been awarded the contract to build the factory building at the plant of the Kroeger Piano Co. It will be of mill construction, four stories and basement, 63 × 162 ft. A freight elevator, steam heat and a sprinkler system will be installed for which bids are now being received.

WESTPORT, CONN.—It is reported that G. W. Bradley & Sons, the axe manufacturers, whose factory in Weston, Conn., was recently destroyed by fire, are seeking a location here for a factory.

WATERBURY, CONN.—The James E. Brooks Co., Archs., of this city, have completed plans for a machine shop and storage building on Bank St. for the Plume & Atwood Mfg. Co. The building will be of reinforced concrete, with terra cotta tile and stucco exterior, 46 × 117 ft., three stories high. Steel stairways will be installed.

MIDDLETOWN, CONN.—George Griswold, Arch., has completed plans for the factory of the Ouro Co., at South Farms. The building will be of brick, with brownstone trim, 40 × 240 ft.

BINGHAMTON, N. Y.—The Osgood Scale Co. contemplates erecting a factory building in the Frist Ward, it is reported.

KINGSTON, N. Y.—The Mohawk Silk Fabric Co., of Fultonville, has accepted plans for a mill which it will erect at Kingston. A 2-story brick building, 50 × 300 ft., will be built, and as soon as completed, part of the machinery equipment in the Fultonville factory will be moved there. The present plant will be operated as an auxiliary. The product consists of ladies' silk gloves, underwear and hosiery. Noted June 1.

✚BUFFALO, N. Y.—WILLIAM F. FELTON, 46 Glenwood Ave., has secured the contract from the Augustine Rotary Engine Co., Ellicott Square Bldg., for the erection of a 3-story and basement factory addition, 50 × 100 ft., to its plant at Elmwood Ave. and the International Bridge branch of the Erie R. R.

JAMESTOWN, N. Y.—The Crescent Tool Co. is having plans completed for a 2-story brick factory building, 50 × 132 ft., to be added to its present plant.

PEEKSKILL, N. Y.—The Bradley Axe Works will erect a factory here. The Peekskill Industrial Association is interested.

RICHVILLE, N. Y.—The J. M. Horton Co., of New York, will rebuild immediately its milk receiving and separating plant here destroyed by fire, with a $50,000 loss.

✚ROME, N. Y.—The NATIONAL CONSTRUCTION CO., of Syracuse, has received the contract for the steel work for the Rome Mfg. Co.'s 2-story addition, 40 × 160 ft., to its plant. The remainder of the construction work will be by day labor under the supervision of Chas. Kiehm, Gardner Bldg., Utica, the Arch.

[illegible]NKERS, N. Y.—The Lyrachord Co., of which J. T. Gibson, 232 Warburton Ave., is a Dir., has been incorporated with $150,000 capital to manufacture and sell electric pianos here.

WATERTOWN, N. Y.—Plans are being completed for a factory building to be erected for Bagley & Sewall, at an estimated cost of $40,000.

PATERSON, N. J.—A mill to cost $100,000 is contemplated here by Emanuel Yerli, a silk manufacturer. It will be located at Railroad Ave. and Ward St.

DICKSON CITY, PA.—According to reports, improvements and additions are to be made to the plant of the Bliss Silk Throwing Co., of Dickson City at a cost of $95,000. New machinery is being installed. This concern operates a chain of throwing plants at Dickson City, South Dickson, North Scranton, Jessup and Alexandria, Va. Valentine Bliss is Pres. and the market representative is Harry A. Forbes, with offices at Paterson, N. J.

ERIE, PA.—Plans have been completed for the extension and expenditure of $25,000 by the Erie Stove Mfg. Co. to enlarge its present plant at 20th and German Sts., and it is expected that construction work will soon be started.

SCRANTON, PA.—The Bliss Silk Throwing Co. is to make improvements and alterations to its plant which will cost about $95,000. New machinery is being installed by the Atwood Machine Co. This company was incorporated in 1907 with a capital of $70,000, and also operates a plant at Alexandria, Va. S. R. Bliss is Pres. and Valentine Bliss is Secy. and Treas.

FRANKLIN, PA.—The High Grade Oil Refining Co. plans to erect a refinery here. H. C. Litzinger, of Chicora, Pa., is Vice-Pres.

FREELAND, PA.—A silk mill is contemplated here by John Shigo, W. E. Martin, B. F. Davis, Wilson Everett and others. A company will be incorporated with $25,000 capital stock, it is stated.

ALIQUIPPA, PA.—The Jones & Laughlin Steel Co., of Pittsburg, will carry on improvements and extensions to its big plants at Aliquippa to the extent of $10,000,000. The plans for the improvements have practically all been completed, as they were included in the original plans for the Aliquippa plant. The company recently doubled the capacity of its tin mills and wire mills there, and has completed its four great Talbot open-hearth steel furnaces, which are ready to be blown in when needed. It has completed four modern blast furnaces and a blooming mill and has arranged for increasing each department mentioned to more than double, without rearranging the ground plans of the plant, according to reports. B. F. Jones, Jr., is Pres.

✚CANTON (Baltimore post-office), MD.—We are officially advised that the contract to build a storage building and warehouse for the Miller Fertilizer Co., at Canton, has been awarded to L. O. HILDEBRAND & SON, of Canton. The drawings were prepared by Theodore Wells Pietsch, Arch., American Bldg., Baltimore. It will be two stories high, of brick and frame. Noted last week.

CUMBERLAND, MD.—The Western Maryland Ry. Co., of Baltimore, will expend about $600,000 for terminal improvements at Cumberland, including the construction of passenger and freight stations, freight yard with a capacity of about 2,000 cars, construction of bridge costing about $100,000, etc. H. R. Pratt, of Baltimore, is Ch. Engr.

✚CURTIS BAY (Baltimore post-office), MD.—The B. F. BENNETT BUILDING CO. has been awarded the contract to erect a warehouse for the Atlantic Fertilizer Co. at Curtis Bay to cost about $35,000. Noted May 18.

FORT HOWARD, MD.—Bids will be received at the office of the Constructing Quartermaster, Fort Howard, for the erection of bakery, of brick construction, with plumbing, heating, lighting, until 10.30 a. m., June 26.

BALTIMORE, MD.—To enlarge their plant McCormick & Co. have purchased the properties 722, 724 and 726 East Pratt St. and 118 West Falls Ave., which will be used as an addition to their present place, 105 to 119 Concord St. The new acquisition gives the firm an opening on Pratt St., allowing the installation of a siding from the Baltimore and Ohio R. R. McCormick & Co. now have a frontage of 300 ft. on Concord St., 224 ft. on West Falls Ave. and 58 ft. on Pratt St. The lots are improved with large warehouses. The West Falls Ave. building will be used exclusively for packing teas. A printing plant will be installed, and one of the warehouses will contain the entire mustard manufacturing plant. Electrical elevators will be put in and each building will be equipped with a sprinkler and automatic fire alarm system, according to reports.

NARROWS, VA.—Walter Graham, of Philadelphia, Pa., and Graham, Va., now located at Narrows, proposes the organization of the River Falls Cotton Mills in connection with his plans for an industrial city near Narrows. It is contemplated to build the plant for operation by electricity from Gap Falls water power electric plant, to construct which Mr. Graham plans organizing the Gap Falls Power & Light Co. His plans are extensive and include the establishment of a number of manufacturing enterprises. The industrial city is to be called [illegible] Gate [illegible] and the New River Terrace Land [illegible] is the title under which the development is being undertaken. Mr. Graham has for some months been developing new iron [illegible]es on his properties, it is stated.

SUFFOLK, VA.—The Carr Mills, of Suffolk has been organized for the purpose of establishing a knitting plant, with a capital of $15,000. The officers are: G. [illegible] Bell, Pres.; W. C. Cross, Vice-Pres.; [illegible] Holladay, Secy.; E. A. Everett, Treas.; J. G. Carr, Gen. Mgr. and Supt.

BUENA VISTA, VA.—The Dickinson Fire Brick Co. will erect a refining plant for preparing paper clays. Construction is to begin immediately. Cost, about $[illegible].

✚RICHMOND, VA.—The Johnston Paper Box Co. has awarded a contract to [illegible] FOX & SONS, Richmond, for the erection of a 3-story factory building, 50 × 120 ft. It will be of brick and stone construction, with steam heat, electric lighting, plumbing, etc. Coleman Johnston is Mgr.

The Halifax Paper Corporation, of Richmond, has been chartered, with $[illegible] capital, to develop timberland and manufacture wood fiber and pulp for paper. Its officers are: Paul G. Hough, Pres.; James H. Price, Vice-Pres.; John Tyler, Secy.-Treas.

BESSEMER CITY, N. C.—A charter of incorporation has been issued to the Harborough Co., of Bessemer City, to manufacture cotton and other textile products. A plant will be erected for this purpose. The company has an authorized capital stock of $100,000, and $10,000 has been subscribed by the company's incorporators: O. F. Mason, of Gastonia, N. C.; J. W. Sanders, of Tuscaloosa, Ala.; and Palmer Brown, of Woonsocket, R. I.

MACON, GA. — According to reports, the Southern Ry. Co., of Washington, D. C., has purchased a 600 × 7,000-ft. tract of land at Macon, and will improve the same for a terminal. Plans include constructing an outbound freight house, enlarging inbound freight house, building cotton platform, etc. Reports state about $500,000 will be expended.

✚MERRYVILLE, LA.—The Orange Lumber Co., of Orange, Tex., is moving its sawmill from Orange to Merryville. Many improvements will be made to the plant, including the construction of concrete tramways. A concrete dam, 700 ft. long, is being built across a ravine near the mill site to create a log-storage pond. The SOUTHERN CONSTRUCTION CO., of Orange, has the contract for constructing seven concrete dry kilns for the company.

✚GLENMORE, LA. — A sawmill, with a daily capacity of 100,000 ft. of lumber, will be built at Glenmora by the W. M. Cady Lumber Co. This company will be capitalized at $200,000, and is being organized by W. M. Cady and E. H. Menard, of Alexandria, La.; Sam Lisso, of El Paso; and others. They have purchased for development 10,000 acres of Virginia long-leaf pine timberlands. The cost will be $75,000, and it is to be ready for operation some time in September. The contract for mill machinery has been awarded to the FILER & STOWELL CO., of Milwaukee, and for boilers to the MURPHY BOILER WORKS, of New Orleans.

NASHVILLE, TENN. — The plant of the Southern Lumber & Mfg. Co., which was recently destroyed by fire, entailing a loss of about $100,000, will be rebuilt. J. R. McIlwaine is Pres.

AKRON, OHIO.—Press reports state that the Goodyear Tire & Rubber Co. plans to build an addition at a cost of $250,000, and to give employment to 400 more men. This company now employs 3,400. It will be 300 × 60 ft. Frank A. Seiberling is Pres.

CINCINNATI, OHIO.—The Cincinnati Ice Co. will build a producing and distributing plant at the intersection of Park Ave. and the Cincinnati, Lebanon & Northern Ry. Cost, $50,000.

CLEVELAND, OHIO. — A manufacturing plant will be erected on Chester Ave. The K. W. Ignition Co., manufacturers of automobile accessories, are the owners of the proposed plant.

COLUMBUS, OHIO.—Incorporation papers of the Clark Grave Vault Co., of Columbus, were filed recently by Albert A. Beem, Allen F. Beck, Hugh D. Clark, Herbert D. Clark and A. H. Johnson. The company plans to enlarge its Columbus factory. Capital stock, $700,000.

DAYTON, OHIO.—Plans are nearing completion for the erection of a 6-story factory for the Buckeye Iron & Brass Works, 326 East Third St. Schenck & Williams, Archs., Arcade Bldg., will soon receive estimates. Approximate cost, $25,000.

MOSIER (Girard post-office), OHIO.—The United States Foundry Co., of Pittsburg, has secured land at Mosier and will establish an extensive plant on the site, it is stated.

YOUNGSTOWN, OHIO. — An open-hearth steel plant of six furnaces, together with a blooming mill, will be built by the Youngstown Sheet & Tube Co., of East Youngstown, as the result of the decision of the directors, the work to start at once. The plant will cost $3,000,000. Some 1,500 men will be employed. Provision is made for other mills later, it is announced.

AKRON, OHIO.—Plans have been completed for the construction of an addition to the factory of the Buckeye Rubber Co. It will be about five stories high and 85 × 50 ft.

LISBON, OHIO.—The Bennett Register Co., recently organized, plans to erect a factory eight stories high, 40 × 120 ft., on a site purchased by the Lisbon Business Association, near the foot of Lincoln Ave.

FORT WAYNE, IND.—The Wayne Knitting Mills and Thieme Bros. Co., of Fort Wayne, have made arrangements for the erection of extensive additions to their plants. The former concern has increased its capital from $1,000,000 to $1,200,000. The latter company was incorporated in 1909 with a capital of $150,000, to manufacture silk hosiery.

CROWN POINT, IND.—The Crown Point Mfg. Co. has ordered plans on which to receive bids for the construction of an extensive addition to its plant, including a moulding room to double the present capacity.

HUNTINGBURG, IND.—The Huntingburg Furniture Co., recently organized, will build a factory, 120 × 200 ft., two stories high. Bids will be received as soon as plans are completed and approved. E. B. Fish is Pres.

DETROIT, MICH.—We are officially advised that plans will be ready for estimates in about a week for the construction of a plant and office building for the Continental Motor Mfg. Co. Albert Kahn and Ernest Wilby, Trussed Concrete Bldg., are the Archs. Noted on June 1.

GRAND RAPIDS, MICH.—Plans have been completed by Thomas Benjamin & Son, Archs., Wenham Bldg., for the erection of a 2-story bakery. The Valley City Biscuit Co., 737 Grandville Ave., is the owner. Cost, $10,000.

MENOMINEE, MICH.—A factory is to be established here by the Dudley Tool Co. About 200 men will be employed.

HIGHLAND PARK, MICH.—Official advices are to the effect that bids will be received for the construction of factory buildings, machine shop, craneways, etc., at Highland Park, according to plans and specifications furnished by the engineering department of the Ford Motor Co., until 9 a. m., June 17. Noted last week under "Detroit, Mich."

HILLSBORO, ILL.—We are officially advised that work is to start immediately on a smelting and sulphuric acid plant for the American Zinc, Lead & Smelting Co., at Hillsboro. C. A. Wettengel, of Hillsboro, is Purchasing Agt., and W. S. Hall, Riddle Bldg., Kansas City, Mo., Engr. Plans for the steel, a total of 600 tons, can be had by addressing the engineer. Inquiries concerning brick, cement and machinery should be addressed to Purchasing Agent.

DE PERE, WIS.—The C. A. Lawton Co. will erect a pattern shop and storage plant on Front St., to be of reinforced concrete and steel construction, 60 × 96 ft.

SHEBOYGAN, WIS.—The K. Schreier Brewing Co. announces that it proposes to rebuild, at once, the elevators and malt house destroyed by fire on June 2. Konrad Schreier is Pres. Cost, $275,000.

KENOSHA, WIS.—The McComber, Whyte Co., Chicago, Ill., steel cable and wire rope, has signed a conditional agreement with the Kenosha Industrial Association to locate its plant in Kenosha. The association is required to raise $45,000 for the construction of a factory building and will donate a site.

ST. PAUL, MINN.—A 2-story pressed brick and cut stone automobile factory will be built at University and Pelham Aves., this city, by the Ware Motor Vehicle Co. It will be 200 × 100 ft., with steam heating and electric light. The company will manufacture a 4-wheel drive commercial truck. J. L. Ware, St. Anthony Park, is Pres. Cost, $50,000.

DES MOINES, IOWA.—Bentley & Olmsted will build a $100,000 shoe factory on the northeast corner of East First St. and Court Ave. this summer to replace the one destroyed by fire some time ago. The building will be four stories high with a half basement. It will be constructed of brick and will cover approximately a quarter of a block, it is reported.

COLUMBIA, MO.—Plans will be prepared by Cope & Stewardson, Archs., Security Bldg., St. Louis, for the construction of a workshop for the State University at Columbia. Estimated cost, $19,000.

ST. LOUIS, MO.—Plans have been completed and are ready for estimates for the erection of a 5-story factory, 150 × 100 ft., for the Rice Stix Dry Goods Co., Tenth and Washington Aves. G. F. A. Brueggeman, Third National Bank Bldg., is the Arch.

Plans are being prepared by Baker & Knell, Archs., Odd Fellows Bldg., for the construction of a 2-story factory on property purchased recently by the Wrought Iron Range Co., 19th St. and Washington Ave. The plant will consist of five buildings. The main structure will be 300 ft. long and 300 ft. wide. The boiler house will be 50 × 50 ft., and three smaller buildings will be erected nearby. Estimated cost, $200,000.

ST. LOUIS, MO.—The National Lead Co. plans to erect an oxide mill. The building is to cover an area 122 × 110 ft. at 5560 to 5570 Manchester Ave., and is to cost $50,000. It will be five stories high in front and one in the rear and of concrete construction.

BROWNSVILLE, TEX.—The Gulf Coast Brick & Tile Co. will install a large quantity of tile-making machinery at its plant near here.

CANADIAN, TEX.—John Faulkner, of Hutchison, Kan., will install a 10-ton ice plant here.

DALLAS, TEX.—The Lamb Mfg. & Cotton Cleaning Corporation, of Dallas, has been chartered, with $500,000 authorized capital stock, to build a plant for manufacturing seed-cotton cleaners, crushers and separators, leaf extractors, etc.

DALLAS, TEX.—O. Q. Rasmussen, of Stoughton, Wis., will establish a plant here for the manufacture of fertilizers.

HAMLIN, TEX.—The Kansas City, Mexico & Orient R. R. Co. will establish car and machine shops here. C. H. Webster, of Sweetwater, is Ch. Engr.

HARLINGEN, TEX.—A cotton-seed oil mill will be erected here. Lon C. Hill is interested.

HEARNE, TEX.—J. B. Folmar, of Gause, Tex., contemplates installing a creamery here.

HOUSTON, TEX.—G. B. Grosvenor, Secy. and Mgr. of the Otis Elevator Co., of Houston, announced recently, according to reports, that the Houston plant would be added to, two buildings being erected adjoining the plant, at a cost of about $25,000, and more than doubling the capacity of the plant. The company owns five acres in German St., near the International & Great Northern tracks, the site of the present plant. In addition to the proposed buildings, a large loading platform will be constructed. The capacity of the plant is a little over one manufactured elevator per day, or about 350 per year. Contracts are about to be awarded.

PLAINVIEW, TEX.—C. A. Malone will install a cotton gin at Plainview.

SAN ANTONIO, TEX.—The Merchants' Ice & Cold Storage Co. will double the capacity of its 85-ton ice plant. It is making other extensive improvements.

SAN MARCOS, TEX.—W. T. Caswell, of Austin, and associates, who recently purchased the cotton compress of the San Marcos Compress Co., at this place, will make important improvements to the plant.

SEALY, TEX.—The Sealy Oil Mill & Mfg. Co., which was recently formed with a capital stock of $35,000, has taken steps for the erection of the plant. W. M. Moore is Pres.

WACO, TEX.—The Southern Disinfectant Co. is being organized for the purpose of establishing a factory at 13th and Mary Sts. for making floor-cleaning preparations and things of that character. John L. Mauk is interested.

WHARTON, TEX.—The Commercial Club here is promoting the installation of a canning factory at Wharton.

AUSTIN, TEX.—W. B. Walker & Sons will install a cold storage plant here, to cost about $75,000.

The Texas Bithulithic Co. of Dallas will install a branch plant here for manufacturing paving material.

COLEMAN, TEX.—The Coleman Mill & Elevator Co. will install new machinery and enlarge its plant here.

CROWN, TEX.—Harry Landa, of New Braunfels, will install a cotton gin here.

DICKENS, TEX.—O. O. Love will install a cotton gin at this place.

GIDDINGS, TEX.—The Lee County Cotton Oil Co. will make improvements to its cotton-seed oil mill at Giddings.

HONDO, TEX.—George Muennink and associates will install an ice factory here.

MOUNT VERNON, TEX.—The National Lumber & Creosoting Co. will install saw mills upon a large tract of hardwood timber near here.

TAYLOR, TEX.—According to press reports extensive improvements are to be made to the International & Great Northern R. R., when it passes out of the hands of the receiver, June 13. It is planned to enlarge the shops at this place and increase the force of employees. O. H. Crittenden, of Palestine, is Consult. Engr.

LOVING, N. MEX.—J. A. Huston, of Carthage, Mo., who purchased the cotton gin at this place, will double the capacity of the plant.

MELROSE, N. MEX.—It is announced that the Southwestern Sugar Co., following the erection of its beet-sugar factory at Portales, will erect a similar factory at Melrose. The company has signed up contracts for about 32,000 acres of sugar beets to be grown this season. Many irrigation pumping plants will be installed upon these farms.

NORTH POWDER, ORE.—Armour & Co., meat packers, of Chicago, have chosen North Powder as the location for a packing plant. Cost, $500,000.

BAKERSFIELD, CAL.—Joseph Baumgarten, of East Bakersfield, has received plans and specifications for the erection of a brewery building at 24th St. and Union Ave., to cost $225,000. Bids for the construction will be taken at once. The structure will be 100 × 100 ft., three and four stories in height, with concrete foundation, steel and iron frame and cement floors.

REEDLEY, CAL.—A factory is to be erected by Olson Bros. for the manufacture of a fruit cart designed to carry trays and sweat boxes to and from drying grounds without the use of a track. The cart is the invention of Olaf Olson.

MONTREAL, QUE.—A syndicate headed by Rudolph Forget, M. P., J. N. Greenshields, K. C., and Clarence J. McCuaig have acquired 1,100 square miles of timber limits in the St. Maurice River district.

The Wayagamack Pulp & Paper Co. will be organized with a capital of $5,000,000, and at the mouth of the St. Lawrence River a large plant will be erected, with a capacity of 100 tons of pulp and 50 tons of paper daily.

GODERICH, ONT.—A large salt plant is said to be an assured fact here, the old salt wells having been tested and found sufficiently fertile. The Hodgkinson process will be used. A. J. King, of Toronto, represents the Salt King Co., promoter of the project.

✚ST. MARYS, ONT.—A cement factory will be established here by American capitalists. Mayor F. G. Sanderson is financially interested. The company has bought the Legge farm of 100 acres, which is situated south of the horseshoe quarry, the rock and clay formation of which will produce the finest Portland cement in Canada. The works will employ 150 men, and have a capacity of 1,200 bbls. daily. The HUNT ENGINEERING CO., of Iola, Kan., has secured the contract for building the factory, which will be of reinforced cement, and will be completed by April 1, 1912.

HAMILTON, ONT.—Prack & Perrine, Engrs., Berger Bldg., Pittsburg, Pa., have completed plans and are receiving bids at their office here for a 3-story and basement factory building, 300 × 60 ft., with an "L." 160 × 60 ft., to be erected by the Standard Underground Cable Co., of Perth Amboy, N. J., for its Canadian business. Estimated cost, $240,000.

REVELSTOKE, B. C.—The Diamond Mills Co. and the Dominion Securities Co. of Canada have bought a large tract of standing timber near Revelstoke, and will immediately commence construction of a paper mill and pulp plant to cost $20,000,000. Water-power development is to be completed next year, and the entire plant is to be in operation in three years, it is reported. Charles A. Barnum of Chicago, F. C. Adams of Duluth and Charles E. Stone of St. Paul are interested. The 50 miles of railroad to be built are to be used as part of the Canadian Northern line.

VANCOUVER, B. C.—F. W. Owen, M. E., of London, England, has announced the location of a proposed steel plant at Pitt Meadows, a 200-acre site on the east bank of the Pitt River, just north of the C. P. R. bridge. English capitalists, for whom Mr. Owen is acting, have applied for incorporation, and the company will erect blast furnaces, steel furnaces and rolling mills with a capacity of 1,000 tons per day.

## MISCELLANEOUS CONTRACTS.

(**Denotes that this work is advertised in Engineering News.*)

U. S. RECLAMATION SERVICE.—All news concerning canal and irrigation projects, etc., will be found under Water Supply—Irrigation.

---

*DREDGING.—Portland, Me.—Bids are asked until noon, July 17, by Lieut. Col. W. E. Craighill, Corps Engrs., U. S. A., for dredging in Saco River.

QUAY WALL EXTENSION.—Portsmouth, N. H.—Bids were received as follows, on June 10, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the construction of a quay wall extension at Portsmouth navy yard: (a) number of feet that contractor will construct for the limit of the appropriation, $100,000; (b) cost of each additional foot: Riverside Construction Co., 39 Cortlandt St., New York, (a) 100 ft., (b) $1,000; R. H. Battle, Inc., Fall River, Mass., (a) 281 ft.; (b) $355; Thomas Fitzgibbon, Beverly, Mass., (a) 371.7 ft.; (b) $269.

SUBWAYS.—Boston, Mass.—A bill has been favorably reported upon to the Legislature for the construction of three subways, the Riverbank Subway, the route along the Charles River, however, being given up for a location under Boylston St.; a subway via South Station to Andrew Sq., South Boston; and a subway around the West End. With this bill is coupled an extension of the subway leases to 1936, and provision is made for further leases to 1961. Total expense involved probably not less than $12,000,000. Edwin S. Davis is Acting Ch. Engr. Boston Transit Comn.

✚FIREPROOFING WORK.—Boston, Mass.—Contract has been awarded by the city to JOHN A. ROONEY, at $13,370, for fireproofing work on the City Hospital. Other bids were: John B. Graham, $14,525; Woodbury & Leighton, $15,986; William Crane, $17,941; Jones & Meehan, $19,765; John J. Farley, $19,600; William S. Morrison & Co., $23,533. A. Shuman is Chn. Hospital Trustees.

FERRYBOAT.—Boston, Mass.—The contract for a double-screw, steel-hull ferryboat has been awarded by the city to the T. S. MARVEL SHIPBUILDING CO., Newburg, N. Y., at $118,000. Bids were opened on June 6, the only other bidder being the Bertelsen & Petersen Engineering Co., of East Boston, at $117,000 for wooden hull. Louis K. Rourke is Comr. Pub. Wks.

*BREAKWATER.—Newport, R. I.—Bids were received as follows on June 9 by Col. Frederic V. Abbot, Corps Engrs., U. S. A., for the construction of a breakwater at Point Judith, R. I.: (a) Section 1, (b) Section 2 (c) Section 3, (d) Sections 1, 2 and 3, each section containing 100,758 short tons, 302,274 short tons estimated for the three sections: The Breakwater Co., Philadelphia, Pa., (a) $3.93 per ton, (b) $3.93, (c) $3.93, (r) $2.11; also a bid of $3 per ton for any two. James E. Gaynor, 39 East 42d St., New York, (a) $2.75, (b) $2.50, (c) $2.35, (d) $2.50. Estate of John Beattie, Leete Island, Conn., (b) $2.23. E. S. Belden & Sons, Hartford, Conn., (a) $2.23.

*DREDGING.—Newport, R. I.—Bids will be received by Col. Frederic V. Abbot, Corps Engrs., U. S. A., Newport, until 2 p. m., July 11, for dredging harbors at New Bedford and Fairhaven, Mass.

REPAIRS TO FIRE HOUSES.—Mount Vernon, N. Y.—Charles C. Howard, Fire Comr., will receive bids until June 16 for repairs to several fire houses, according to plans and specifications on file at headquarters.

HOSE.—New York, N. Y.—Bids will be received by William H. Edwards, Comr. St. Cleaning, until noon, June 22. Contract for furnishing and delivering 9,000 ft. of 2½-in. rubber hose. Boros. Manhattan, The Bronx and Brooklyn.

IMPROVING PLAYGROUND.—New York, N. Y.—Bids will be received by the Park Board, Dept. of Parks until 3 p. m., for improving the playground at the northwest corner of Worth and Baxter Sts., Boro. Manhattan.

REPAIRS TO FIRE BOAT, FIRE QUARTERS.—New York, N. Y.—Bids will be received by Joseph Johnson, Fire Comr., until 10.30 a. m., June 21, for furnishing all the labor and materials required for making repairs to and painting the hull of the fireboat "Abram S. Hewitt," and for painting the hulls of the fireboats "Zophar Mills," "George B. McClellan," "James Duane," "Thomas Willett" and "Cornelius W. Lawrence;" also for furnishing all the labor and materials required for making repairs to the quarters of Engine Companies Nos. 62, 72 and 82, Boro. The Bronx.

IMPROVING PLAYGROUND.—New York, N. Y.—Bids will be received by the Park Board, Dept. of Parks, until 3 p. m., June 22, for improving the playground on the south side of 101st St., between Second and Third Aves., Boro. Manhattan.

FENCING.—New York, N. Y.—Bids will be received by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, until 2 p. m., June 21, for furnishing and erecting fencing at the Gravesend pumping station, Boro. Brooklyn.

ROOFING WORK.—New York, N. Y.—Bids will be received by the Department of Public Charities until 2.30 p. m., June 21, for furnishing all the labor and materials required for certain roofing work on various buildings at the Metropolitan Hospital, Blackwell's Island, City of New York.

LUMBER.—New York, N. Y.—Bids will be received by Joseph Johnson, Fire Comr., until 10.30 a. m., June 19, for furnishing and delivering No. 1 spruce lumber.

HOSE WAGONS.—New York, N. Y.—Bids will be received until 10.30 a. m., June 20, by Joseph Johnson, Fire Comr., for furnishing and delivering two automobile hose wagons, and six Chassis fitted to six high-pressure hose wagons.

FIELD HOUSE.—New York, N. Y.—Bids for labor and material required for furnishing and erecting a field house in 101st St. playground, situated on the south side of East 101st St., between Second and Third Aves., Boro. Manhattan, were received as follows, by the Park Board on June 8: Brettholz-Krumholz Contracting Co., 302 Broadway, New York, $11,844; Edmund D. Broderick, 1382 Lexington Ave., New York, $10,984; Concord Construction Company, 38 Park Row, New York, $12,447; Cosgrove-Daly Co., 1968 Broadway, New York, $10,500; George F. Driscoll, 548 Union St., Brooklyn, N. Y., $13,689; Wm. Horne Co., 71 W. 132d St., New York, $11,920; Kelly & Kelley, Inc., Long Island City, N. Y., $12,254; J. M. Knopp, 514 West 43d St., New York, $11,214; The Merrick Fireproofing Co., 1 Broadway, New York, $12,350; Daniel J. Ryan, 723 Third Ave., Brooklyn, N. Y., $10,450; Weil & Lustig, 28 East 85th St., New York, $12,910; Charles Willi, 1293 Second Ave., New York, $10,995.

BARN AND ICE HOUSE.—Thiells, N. Y.—Bids are asked by S. B. Kirkbride, Secy. Bd. of Managers, Room 215, 55 Wall St., New York, until 10 a. m., July 6, for the construction of barn and ice house at Letchworth Village, Thiells.

PAVING PITCH, CEMENT, ETC.—New York, N. Y.—Bids will be received by George McAneny, Pres. Boro. Manhattan, until 2 p. m., June 21, for furnishing and delivering 1,300 tons of paving pitch; for furnishing and delivering 900 bbls. of Portland cement; for furnishing and delivering 3,500 cu. yds. of washed gravel; for furnishing and delivering 200 cords of pine wood, and for furnishing and delivering 300 cu. yds. of trap rock broken stone and 300 cu. yds. of trap rock screenings.

CAPSTANS.—New York, N. Y.—See item under U. S. Possessions.—Capstans, Hawaii.

STORAGE AND LOCK BUILDING.—New York, N. Y.—Bids will be received until 11 a. m., June 26, by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, for erecting a storage and locker building, forming track, etc., for athletic field at Clinton, Cherry and Water Sts., Boro. Manhattan.

PIER.—Ocean City, N. J.—Articles of incorporation were filed on June 8 with the County Clerk at Camden, by the Hand's Ocean City Pier Co., with a capital of $150,000. The company will construct, it is reported, a large ocean pier here.

MOTOR TRUCKS.—Washington, D. C.—Bids will be received until 11 a. m., July 1, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for eight 5,000-lb., and four 10,000-lb. electric motor trucks.

PIERS.—Norfolk, Va.—The present plans of the Old Dominion Terminal Co. contemplate four piers at Norfolk, as follows: One pier 300 × 60 ft., one pier 800 × 80 ft., one pier 800 × 222 ft., one pier 1,100 × 222 ft., the construction to be timber creosoted. H. C. Higgins is Supt. Engr., Pier 26, N. R., New York.

✚DRY DOCK PUMPING EQUIPMENT.—Norfolk, Va.—The contract for dry dock pumping equipment, bids opened on May 27, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., has been awarded to the WESTINGHOUSE ELECTRIC & MFG. CO., Norfolk, at $20,802. List of bidders noted on June 1.

PIER.—Norfolk, Va.—The Norfolk & Western Ry. Co., it is reported, will construct a large coal pier at Lambert's Point, Norfolk. N. D. Mayer is Gen. Mgr., Roanoke, Va.

✚*LOCK AND DAM.—Wheeling, W. Va.—Bids were opened as follows, on June 5, by Maj. F. W. Altstaetter, Corps Engrs., U. S. A., Wheeling, for constructing Lock and Dam No. 15, Ohio River, near New Martinsville, W. Va.: Ohio River Contract Co., Evansville, Ind., $752,347; alternative bid, $749,697. Sheridan-Kirk Contract Co., Cincinnati, Ohio, $745,533, and $749,268. The DRAVO CONTRACTING CO., Pittsburg, Pa., $742,451 (awarded contract) and $741,306.

*STONE.—Savannah, Ga.—Bids will be received by Col. Dan C. Kingman, Corps Engrs., U. S. A., Savannah, until noon, July 12, for furnishing and placing stone for raising the training wall in Brunswick Harbor, Ga.

✚WHARVES.—Savannah, Ga.—The contract has been awarded to BURWELL & HILLYER, of Jacksonville, Fla., for constructing wharves, warehouses and sheds for the Seaboard Air Line Ry. at Savannah, at about $100,000.

CEMENT.—Montgomery, Ala.—Bids were received by Lt.-Col. G. D. Fitch, Corps Engrs., U. S. A., on May 31, for 35,000 bbls. American Portland cement, as follows: (a) brand; (b) weight in lbs. per sack; (c) price per sack for 20,000 bbls., delivered at Lock, Ala.; (d) price per sack for 15,000 bbls., delivered at Rome, Ga.; (e) allowance per sack for sacks returned: Kirkpatrick Sand & Cement Co., Birmingham, Ala., (a) Coosa, (b) 95 cts., (c) 51 cts., (d) 50 cts., (e) 10 cast.; R. O. Campbell Coal Co., Atlanta, Ga., (a) Royal, (b) 95 cts., (c) 51 cts., (e) 10 cts.; Southern States Portland Cement Co., Rockmart, Ga., (a) Southern States, (b) 95 cts., (c) 51 cts., (d) 45 cts., (e) 10.05 cts.

TOWBOAT.—Vicksburg, Miss.—Bids were received as follows on June 6 by Capt. J. A. Woodruff, Corps Engrs., U. S. A., Vicksburg, for furnishing and delivering one steel-hull towboat: (a) price; (b) time of delivery after notification of approval of contract, Sundays and holidays excepted: Thomas M. Rees, P. O. Box 709, Pittsburg, Pa., (a) $68,500, (b) 300 days; Dubuque Boat & Boiler Works, foot of Third St., Dubuque, Iowa, (a) $67,335, (b) 294 days; Edward J. Howard, Jeffersonville, Ind., (a) $55,640, (b) 300 days; The Charles Ward Engineering Works, Charleston, W. Va., (a) $89,250, (b) 300 days.

DITCHES.—Crowley, La.—Bids will be received until June 15 by the Board of Commissioners of the Sixth Ward and Crowley Drainage District for constructing about 40 miles of open ditches from two to six miles in length, 16 to 40 ft. wide, two to five ft. deep, about 600,000 cu. yds., and about 90 acres of clearing, no rock, mostly open prairie.

✚SHED WORK.—New Orleans, La.—Contracts for completing the work on the William A. Kernaghan shed have been awarded by the Board of Commissioners of the Port of New Orleans, it is reported, as follows: To the SALMON BRICK & LUMBER CO. for sheathing and nailing strips, at $15,675; ACME LUMBER CO. for furnishing and delivering factory work, $2,790; JOHN REISS for placing and painting sheathing, nailing strips and factory work, $13,050; NEW ORLEANS ROOFING & METAL WORKS for placing the corrugated iron sidings and guttering on the shed, $8,316; to same, for a 5-ply built-up roof, $16,553.

BRUSH, ETC.—Memphis, Tenn.—Bids will be received until noon, July 1, by the Mississippi River Commission, First and Second Districts, office of Capt. Clarke S. Smith, Corps Engrs., U. S. A., Memphis, for furnishing brush and poles for revetment work.

CEMENT.—Cincinnati, Ohio.—Bids were received as follows on May 25 by Maj. John C. Oakes, Corps Engrs., U. S. A., Cincinnati, for furnishing and delivering f. o. b. Frankfort, Ky., about 4,600 bbls. American Portland cement for use in repair of Dam No. 5, Kentucky River: Kosmos Portland Cement Co., Inc., Louisville, Ky., Kosmos brand, $1.80 per bbl.; total, $8,280; 10 cts. rebate on empty sacks returned. Ironton Portland Cement Co., Ironton, Ohio, Limestone, $1.75; $8,050; 10 cts. Universal Portland Cement Co., Pittsburg, Pa., Universal, $1.70; $7,820; 10 cts. Atlas Portland Cement Co., Chicago, Ill., Atlas, $1.92; $8,832; 10 cts. Virginia Portland Cement Co., New York, Old Dominion, $1.72; $7,912; 10 cts.

✚DAM.—Newark, Ohio.—GEORGE J. BOCK & SON have been awarded the contract for constructing a concrete dam here at the following prices: 280 cu. yds. concrete, $6; 17.2 tons steel sheet piling, 50 cts. per sq. ft.; 1,470 lin. ft. timber piling, 40 cts.; 33 cu. yds. rip-rap, $1.

✚GRAND STAND.—Ravenna, Ohio.—The Directors of the County Fair have let a contract for a new grand stand, to be completed by August 20, to P. I. FRANK, of Ravenna.

DITCH.—Lebanon, Ind.—Bids will be received until 2 p. m., July 1, by Ollie M. Dodd, Supt. of Boone County, at the Surveyor's Office, Lebanon, for the construction of a public ditch.

DREDGING.—Detroit, Mich.—Bids were received as follows on June 6 by Col. C. McD. Townsend, Corps Engrs., U. S. A., Detroit, for dredging in Black River, at Port Huron, Mich: Great Lakes Dredge & Dock Co., Chicago, Ill., 19½ cts.; Muir-O'Sullivan Dredge & Dock Co., Port Huron, Mich., 15½ cts.

DRAINAGE.—La Crosse, Wis.—The Trempealeau Drainage Co., it is reported, will soon award contracts to change the course of the Trempealeau River in order to drain 8,000 acres between Marshland and Trempealeau, Wis. Capt. W. A. Thompson is Supt.

DRAINS.—Rockwell City, Iowa.—Bids will be received by the County Auditor of Calhoun County, in July or August, for Drain No. 143, established recently by the Calhoun County Board of Supervisors. Estimated cost, $20,000. A. O. Anderson is Engr., Ames, Iowa. Several smaller drains have also been established.

DITCHES.—Anoka, Minn.—Bids will be received until June 22 by Arthur A. Coswell, County Audr., Anoka, for constructing the main ditch and branches of Judicial Ditch No. 1, Anoka County, about 96,315 cu. yds. of excavation and 4,800 ft. of tile work. Estimated cost, $10,963 and $3,479, respectively.

DITCH.—Jackson, Minn.—Bids will be received until June 23 by P. D. McKellar, County Audr., for constructing Judicial Ditch No. 3; about 61,358 cu. yds. of excavation and clearing away waste banks, 19,920 cu. yds.

✚DRAIN.—Billings, Mont.—Bids were received on June 1 for the construction of the Hulling drain from plans of the Henry Gerharz Engineering Co., Billings. The contract for construction has been awarded to E. LINDSTROM, Billings, at $22,490. Other bidders were: Corn & Auge, Billings, $24,589; Frank Savarsey, Billings, $23,750. Noted on May 25.

DRAINAGE.—Butler, Mo.—Bids will be received until June 21 by George Bird, Engr., at the office of C. G. Weeks, County Clk., Butler, for the excavation of 1,140,000 cu. yds. in Drainage District No. 1.

REVETMENT.—St. Louis, Mo.—The House of Delegates has passed a bill appropriating the sum of $150,000 for the revetment of the riverbank at Chain of Rocks.

LEVEE CONSTRUCTION.—Marion, Ark.—Bids will be received by the St. Francis Levee Board, Marion, until noon, June 29, for the construction of 500,000 cu. yds. of levee enlargement work. Apply to B. G. Covington, Ch. Engr., 368 Randolph Bldg., Memphis, Tenn., for further information. O. N. Kilough is Pres. Bd.

✚CANAL. — Wilmont, Ark. — The contract has been awarded to CLYDE A. WOLF, of La Grange, Ind., by the Board of Drainage Commissioners, for dredging a drainage canal and laterals in Ashley County, about 700,000 cu. yds.

DITCH.—Paragould, Ark.—C. E. Waddell, of Paragould, is preparing plans for the construction of a ditch to drain 10,000 acres. Estimated cost, $250,000. J. M. Futrell is Comr., Paragould. Noted on May 25.

✚CANAL WORK.—Algoa, Tex.—The Galveston County Drainage District No. 1, R. H. Bushway, Chn., Algoa, received bids on May 30 for the construction of laterals opening La Flores Bayou and Willow Bayou, excavating about 100,000 cu. yds. of earth. The contract has been awarded to J. C. KELSO, Galveston, Tex., at $16,743. E. Evans is Engr., Galveston, Tex.

DREDGING.—Galveston, Tex.—Bids were received by Maj. G. P. Howell, Corps Engrs., U. S. A., on May 25, for dredging the mouth of Brazos River, about 201,000 cu. yds., as follows: Bowers Southern Dredging Co., Galveston, 15 cts. per cu. yd.; Home Dredging Co., Mobile, Ala., 17.9 cts.

SAND FILLING. — Galveston, Tex. — John M. Murch, County Audr., Galveston, will receive bids until 11 a. m., June 19, for the county's share of sand filling required for mainland approach to the causeway at Virginia Point, in accordance with plans and specifications, which can be seen at the engineer's office of the Gulf, Colorado & Santa Fe Ry., bids to be made at price per cu. yd.

NAVIGATION DISTRICT. — Brownsville, Tex.—The Brownsville Waterways Association has been organized here, it is reported, for the purpose of bringing about the creation of a deep water navigation district and issuing bonds for the purpose of dredging and opening a deep-water channel at Brazos Santiago Pass.

*IRON AND STEEL.—Dallas, Tex.—Bids will be received until noon, July 15, by Capt. T. H. Jackson, Corps Engrs., U. S. A., Dallas, for iron and steel delivered at Kieburg, Tex., on the Texas & New Orleans Ry.

*DREDGING.—Galveston, Tex.—Bids will be received until noon, July 8, by Maj. G. P. Howell, Corps Engrs., U. S. A., Galveston, for dredging deep-water harbor at Harbor Island, Aransas Pass, Tex.

LOCOMOTIVE.—Boise, Idaho.—Bids were received as follows by the U. S. Reclamation Service, Washington, D. C., on June 5 for furnishing one locomotive for the Boise project, Idaho: Vulcan Iron Works, Wilkes-Barre, Pa., $10,225; H. K. Porter Co., Pittsburg, Pa., $10,140; American Locomotive Works, 30 Church St., New York, $11,585; Baldwin Locomotive Works, Philadelphia, Pa., $9,750.

STABLES.—Salt Lake City, Utah.—Bids were received as follows on June 2 by the city for constructing city stables: (2) construction of stables, warehouse, work shops and wagon sheds above surface grade; (b) excavation per cu. yd. below grade line; (c) concrete per cu. yd. below grade line: P. J. Moran, Salt Lake City, (a) $42,647, (b) 70 cts., (c) $6.50, 120 days; Lynch-Cannon Engineering Co., (a) $44,600, (b) 75 cts., (c) $7.25, 120 days; Gillis Construction Co., (a) $44,885, (b) 60 cts., (c) $7.90, 120 days; Con. West, (a) $47,887, (b) 50 cts., (c) $6.50, 120 days; Yilladsen Bros., (a) $49,300, (b) 50 cts, (c) $7, 120 days; Fred Dreyer, (a) $49,385, (b) 87 cts., (c) $8.53, 125 days; O'Byrne Const. Co., (a) $49,750, (b) 50 cts., (c) $5.40, 150 days; John Holt, (a) $54,329, (b) 75 cts., (c) $7; A. A. Clark, (a) $55,294, (b) 55 cts., (c) $6.24, 200 days.

✚LONG BEACH, CAL.—The CRAIG SHIPBUILDING CO. has secured a contract for constructing a submarine, 70 ft. long. Estimated cost, $70,000.

CREEK IMPROVEMENT.—Santa Barbara, Cal.—A. L. Sonderegger, Consult. Engr., Central Bldg., Los Angeles, Cal., has filed his report with the City Council for the improvement of Mission Creek, and estimates the cost at $83,000.

(Continued on next page.)

## CONTRACT PRICES.

*LOCK AND DAM.—Wheeling, W. Va.—Bids were received on June 5 by Capt. F. W. Altstaetter, Corps Engrs., U. S. A., Wheeling, for constructing Lock and Dam No. 15, Ohio River, near New Martinsville, W. Va. Bids were received from (A) Ohio River Contract Co., Evansville, Ind.; (B) Sheridan-Kirk Contract Co., Cincinnati, Ohio; (C) the DRAVO CONTRACTING CO., Pittsburg, Pa. (awarded contract on regular bid).

### LOCK AND DAM NO. 15, OHIO RIVER, NEAR NEW MARTINSVILLE, W. VA.

| | A. | B. | C. |
|---|---|---|---|
| 4,270 lin. ft. cofferdam, 16-ft. | $20.00 | $20.00 | $20.00 |
| 1,500 lin. ft. cofferdam, 10-ft. | 10.00 | 5.00 | 5.00 |
| 184,260 cu. yds. common excavation | .70 | .65 | .65 |
| 1,000 cu. yds. rock excavation | 1.25 | 1.00 | 3.00 |
| 32,000 cu. yds. fill | .30 | .40 | .30 |
| 2,300 cu. yds. riprap | 3.00 | 4.00 | 5.00 |
| 250 cu. yds. stone paving | 5.00 | 6.50 | 5.00 |
| 6,750 lin. ft. round piles | .60 | .70 | .60 |
| 95,000 ft. B. M. sheet piles | 60.00 | 70.00 | 70.00 |
| 3,000 ft. B. M. common timber | 50.00 | 70.00 | 90.00 |
| 68,000 ft. B. M. oak timber | 80.00 | 80.00 | 80.00 |
| 180 cu. yds. reinforced concretee | 10.00 | 12.00 | 12.00 |
| 65,000 cu. yds. concrete (solid construction) | 5.50 | 5.63 | 5.75 |
| 59,600 cu. yds. concrete (arched-void construction) alternative bid | 6.00 | 6.25 | 6.30 |
| 1,900 cu. yds. concrete paving | 7.00 | 7.75 | 7.00 |
| 919,000 lbs. structural steel | .07 | .065 | .06 |
| 21,200 lbs. reinforcing rods | .06 | .055 | .06 |
| 53,300 lbs. forgings (including wrought | .06 | .058 | .065 |
| 75,400 lbs. bolts, etc | .06 | .055 | .065 |
| 250,200 lbs. iron castings | .06 | .055 | .065 |
| 181,700 lbs. steel castings | .08 | .098 | .065 |
| 1,170 lbs. bronze | .90 | .77 | 1.00 |
| 370 lin. ft. pipe, 5-in. | 2.50 | 1.59 | 2.15 |
| 2,540 lin. ft. pipe, 4-in. | 2.00 | 1.10 | 1.45 |
| 1,030 lin. ft. pipe, 3-in | 1.50 | .77 | 1.00 |
| 190 lin. ft. pipe, 2½-in | 1.50 | .60 | .75 |
| 580 lin. ft. pipe, 2-in. | 1.50 | .40 | .50 |
| 860 lin. ft. tile drain | .75 | .55 | .65 |
| Totals | $752,347 | $745,533 | $742,451 |
| Totals of alternative bids | $749,697 | $749,268 | $741,306 |

*SIPHON.—New York, N. Y.—Bids were received on May 23 by the Board of Water Supply for Contract 90, for completing the Hudson River siphon, a deep concrete-lined, pressure tunnel in rock, 14 ft. inside diameter, extending under the Hudson River about 1,100 ft. below the water surface, with two shafts 3,022 ft. apart on the opposite shores between Storm King and Breakneck Mountains, in the towns of Cornwall, Orange County, and Fishkill, Dutchess County, N. Y. Four bids were received from the following: (A) Anthony C. Douglas, Niagara Falls; (B) Winston & Co. and Br[illegible], New York; (C) T. A. Gillespie Co., New York; (D) MacArthur Bros. Co., New York.

### CONTRACT 90, HUDSON SIPHON.

| | A | B | C | D |
|---|---|---|---|---|
| 2,160 lin. ft. removing shaft support | $6.00 | $15.00 | $10.00 | $16.00 |
| 1,000 cu. yds. scaling in shafts | 4.50 | 5.00 | 10.00 | 5.00 |
| 50 lin. ft. refilling in downtake shaft | 25.00 | 20.00 | 25.00 | 10.00 |
| 28,000 cu. yds. excavation, tunnels | 10.50 | 14.00 | 17.50 | 16.50 |
| 500 sq. yds. addit. trimming in shafts & tunnels | 4.00 | 5.00 | 6.00 | 6.00 |
| 400,000 lbs. struc. steel roof support, furnishing | .04 | .04 | .03 | .055 |
| 500,000 lbs. struc. steel roof support, erecting | .04 | .05 | .02 | .02 |
| 50,000 ft. B. M. temporary timbering | 60.00 | 75.00 | 100.00 | 70.00 |
| Additional construction pumping plant | 125,000 | 75,000 | 140,000 | 175,000 |
| Additional elect. driven centrifugal pumps, two units | 15,000 | 25,000 | 15,000 | 15,000 |
| 600,000 million ft.-gallons pumping from shafts and tunnels | .55 | .25 | .30 | .50 |
| 5,400 lin. ft. drainage channels for shafts & tunnels | 3.50 | 4.00 | 2.00 | 2.00 |
| 20 lin. ft. forms for lining downtake shaft, furnishing | 15.00 | 90.00 | 100.00 | 75.00 |
| 60 lin. ft. forms for lining drainage shaft, furnishing | 15.00 | 90.00 | 100.00 | 90.00 |
| 100 lin. ft. forms for lining tunnels, furnishing | 15.00 | 60.00 | 100.00 | 60.00 |
| Special forms for junctions, etc. | 1,000 | 2,000 | 5,000 | 5,000 |
| 857 lin. ft. using forms in downtake shaft | 3.00 | 7.00 | 10.00 | 5.50 |
| 1,084 lin. ft. using forms in drainage shaft | 3.00 | 7.00 | 10.00 | 5.50 |
| 3,012 lin. ft. using forms in tunnels | 3.00 | 7.00 | 5.00 | 4.00 |
| 11,500 cu. yds. concrete masonry in shafts | 12.00 | 14.00 | 12.00 | 18.50 |
| 15,000 cu. yds. concrete masonry in tunnels | 9.50 | 14.00 | 13.00 | 10.00 |
| 500 cu. yds. excess concrete masonry in tunnels | 3.00 | 3.00 | 3.00 | 3.00 |
| 100 cu. yds. brick masonry in shafts & tunnels | 25.00 | 15.00 | 10.00 | 15.00 |
| 1,200 cu. yds. dry packing | 4.00 | 3.00 | 3.00 | 3.00 |
| 100,000 lbs. steel castings, furnishing & erecting | .15 | .10 | .08 | .12 |
| 185,000 lbs. steel interlining in drainage shaft | .07 | .08 | .08 | .10 |
| 300 lin. ft. drilling holes (1½-in. or smaller) | .50 | 4.00 | 1.00 | .50 |
| 600 lin. ft. drilling holes (1¾ to 2½-in.) | .75 | 4.00 | 1.50 | .70 |
| 2,000 lin. ft. core borings | 8.50 | 15.00 | 10.00 | 20.00 |
| 4,000 lin. ft. steel pipe for grouting | .40 | 2.00 | .30 | .30 |
| Plant and equip. for grouting | 10,000 | 15,000 | 5,000 | 2,500 |
| 100,000 lbs. grouting rings | .07 | .05 | .10 | .15 |
| 500 grouting connections, making | 1.25 | 1.00 | 3.00 | 2.00 |
| 100 grouting rings and pads, setting | 2.00 | 25.00 | 25.00 | 20.00 |
| 600 tons of sand for grout | 2.50 | 6.00 | 3.00 | 2.50 |
| 1,200 cu. yds. mixing and placing grout | 6.50 | 15.00 | 9.00 | 10.00 |
| Five months hydrostatic tests | 2,000 | 1,000 | 5,000 | 2,000 |
| 5,000 cu. yds. excavation in open cut | 1.10 | 3.00 | 5.00 | 3.50 |
| 1,300 cu. yds. refilling and embanking | .50 | 1.00 | 1.50 | .75 |
| 40,000 ft. B. M. timber and lumber | 60.00 | 60.00 | 60.00 | 60.00 |
| 1,500 cu. yds. concrete masonry in open cut | 7.00 | 8.00 | 15.00 | 9.00 |
| 50 cu. yds. reinforced concrete | 7.50 | 15.00 | 20.00 | 15.00 |
| 63,000 bbls. Portland cement | 1.60 | 1.65 | 1.70 | 1.50 |
| 26,000 lbs. steel for reinforcing concrete | .04 | .05 | .06 | .04 |
| 165,000 lbs. miscellaneous wrought iron, cast iron and steel | .10 | .05 | .10 | .07 |
| 2,000 lbs. galvanizing | .03 | .02 | .03 | .04 |
| 500,000 lbs. caring for and setting metal work | .04 | .02 | .07 | .02 |
| 3 tons c.-i. pipe and specials | 100.00 | 100.00 | 100.00 | 90.00 |
| 5 gates and valves | 100.00 | 50.00 | 100.00 | 60.00 |
| 16,000 lbs. bronze pipe | .75 | .50 | 1.00 | .60 |
| 100 lin. ft. 12-in. & smaller vitrified pipe | 1.50 | 1.00 | 1.00 | 1.25 |
| 100 cu. yds. dry rubble masonry | 4.50 | 4.00 | 4.00 | 4.00 |
| 100 cu. yds. rubble masonry & paving in mortar | 6.50 | 4.00 | 5.00 | 5.00 |
| 100 cu. yds. crushed stone and gravel | 2.00 | 2.00 | 3.00 | 2.00 |
| 63 lin. ft. reinforced-concrete ladders | 4.50 | 5.00 | 10.00 | 5.00 |
| Cleaning up | 10,000 | 1,000 | 5,000 | 1,000 |
| Totals | $1,432,000 | $1,483,936 | $1,649,000 | $1,755,168 |

*LOCK AND DAM.—Cincinnati, Ohio.—Bids were received on May 26 by Maj. John C. Oakes, Corps Engrs., U. S. A., Cincinnati, for constructing Lock and Dam No. 14, Kentucky River, at Heidelberg, Ky. Bids were received from (A) Skene-Richmond Contract Co., Shelbianna, Ky.; (B) Gahren-Dodge & Maltby, New York; (C) Dravo Contracting Co., Pittsburg, Pa.; (D) Gabler & Co., Dayton, Ohio; (E) George C. Hodgson, Dayton, Ohio; (F) Mason & Hanger Co., Richmond, Ky.; (G) Smith-Towles & Co., Thirteen, Ky.

### LOCK AND DAM NO. 14, KENTUCKY RIVER, at HEIDELBERG, KY.

| | A. | B. | C. | D. | E. | F. | G. |
|---|---|---|---|---|---|---|---|
| 85,000 cu. yds. earth excavation | $0.81 | $0.39 | $0.50 | $0.50 | $1.00 | $0.50 | $0.45 |
| 6,000 cu. yds. rock excavation | 2.50 | 1.49 | 3.00 | 2.00 | 2.00 | 1.50 | 2.75 |
| 53,000 cu. yds. fill | .50 | .30 | .45 | .30 | .75 | .40 | .38 |
| 1,100 cu. yds. ballast | 1.50 | 1.35 | 3.00 | 1.85 | 1.20 | 1.50 | 1.80 |
| 36,000 cu. yds. concrete | 4.65 | 4.15 | 4.60 | 5.40 | 4.65 | 5.00 | 4.49 |
| 37,000 bbls. cement | 2.00 | 2.05 | 2.50 | 1.90 | 1.50 | 2.00 | 2.27 |
| 900 cu. yds. paving | 6.00 | 4.70 | 5.00 | 5.40 | 4.65 | 5.00 | 5.75 |
| 500 tons (short) derrick stone | 1.60 | 2.00 | 2.00 | 1.75 | 1.00 | 3.00 | 2.00 |
| 800 tons (short) rip-rap | 1.25 | 1.75 | 2.00 | 2.25 | 1.00 | 2.00 | 1.25 |
| 12,000 ft. B. M. timber, per M. ft. | 90.00 | 90.00 | 100.00 | 120.00 | 125.00 | 100.00 | 110.00 |
| 320,000 lbs. iron and steel | .08 | .06 | .05 | .07¾ | .051 | .08 | .07¼ |
| 240 lin. ft. drains | .50 | .40 | 2.00 | .40 | .50 | 1.00 | .50 |
| 860 lin. ft. fencing | .25 | .10 | 1.00 | .35 | .20 | 1.50 | .30 |
| 45 lin. ft. gages | 1.00 | 1.00 | 2.00 | 1.75 | 2.00 | 1.00 | 1.00 |
| 1 acre clearing and grubbing (lump sum) | 100.00 | 50.00 | 200.00 | 200.00 | 100.00 | 50.00 | 200.00 |
| Totals | $381,760 | $311,912 | $371,680 | $371,586 | $384,757 | $364,375 | $355,378 |

## MISCELLANEOUS CONTRACTS.

WATERFRONT IMPROVEMENT. — San Francisco, Cal.—Plans for expenditure of $9,000,000 to improve the waterfront, it is reported, are being made by the new Board of Harbor Commissioners. A. B. Saph, Asst. State Engr., in charge of harbor work, is outlining the general scheme of improvements which is to be undertaken as soon as the $9,000,000 becomes available from bonds in July. The scheme calls for the rearrangement of the docks north of the Ferry buildings, completion of the Ferry building under the original plans of 1894 by adding 80-ft. wings to either end, construction of 1,750 ft. of permanent seawall from Harrison St. north, construction of a bridge at the foot of Channel St., and extension of the Belt R. R. by installing a surface crossing with the United R. R. tracks in Market St. and connecting the parts of the State's road on both sides of Market St. The Board plans to prepare docks near the Ferry building to the northward for accommodation of the big liners which will bring passengers through the canal when it is opened. Rearrangement of the north side docks will provide wider slips.

GRANDSTAND. — Sacramento, Cal.—Bids will be received until noon, June 29, at the office of N. Ellery, State Engr., State Capitol Bldg., Sacramento, for the construction of a grandstand at the State Agricultural Park Grounds, at Sacramento.

✚BULKHEADS, WHARVES. — Stockton, Cal.—The contract has been awarded to the EMPIRE NAVIGATION CO., of Stockton, for the construction of bulkheads and wharves along McLeod's Lake. Noted on June 1.

ALTERATIONS TO RIVER HOUSE.—Fort William, Ont.—The Canadian Pacific Ry. Co. has awarded a contract to the JOHN S. METCALF CO., Ltd., 54 St. Francis Xavier St., Montreal, Que., and Chicago, Ill., for alterations and repairs to the river house of its steel elevator "D" at Fort William, to be completed in time for this year's crop.

BREAKWATER.—Port Arthur, Ont.—Bids will be received by R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, Ont., until 4 p. m., July 5, for the construction of a breakwater at Bare Point, Port Arthur. Plans, specifications and forms of contract can be seen and forms of proposal obtained at Ottawa and at the offices of E. B. Temple, District Engr., Port Arthur; J. G. Sing, District Engr., Confederation Life Bldg., Toronto; H. J. Lamb, District Engr., London, Ont.; and J. L. Michaud, District Engr., Merchants' Bank Bldg., St. James St., Montreal, Que.

HARBOR IMPROVEMENTS. — St. John, N. S.—The Board of Public Works, Ottawa, Ont., will soon let the contract, it is reported, for harbor improvements here, including dredging Courtney Bay, construction of a dry dock and ship-repairing plant and erection of berths for three ocean steamers. R. C. Desrochers is Secy., Ottawa.

PIER AND SHEDS.—Halifax, N. S.—Bids will be received until noon, July 20, by L. K. Jones, Secy. Dept. Railways and Canals, Ottawa, Ont., for the construction of a pier and sheds at the deep-water terminus of the Intercolonial Ry. at Halifax. Plans, specifications, etc., may be seen and full information obtained on and after June 20 at the office of the Chief Engineer of the Department of Railways and Canals, Ottawa, and at the office of the Chief Engineer of the Intercolonial Ry., at Moncton, N. B., or at the office of John Kennedy, Consult. Engr., Montreal.

✚OIL STORAGE TANKS.—Tampico, Mex.—The Mexican Eagle Petroleum Co., of Mexico City, has awarded a contract, it is reported, to the PETROLEUM IRON WORKS, of Sharon, Pa., for the erection of 50 steel oil-storage tanks, each of 55,000 bbls. capacity, to be put up at different points on the pipe line between Tuxpam and Tampico.

### U. S. POSSESSIONS.

DOCKS.—Panama.—The Isthmian Canal Commission has approved plans, it is reported, for a system of five reinforced-concrete docks for the Atlantic entrance of the canal. Estimated cost, $7,811,666.

STEEL RAILS.—Panama.—Bids will be received by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal, Comn., until July 18 for furninshing steel rails for the period ending June 30, 1912. Circular No. 635.

BOILERS, EQUIPMENT, ETC.—Hawaii.—Bids will be received until 11 a. m., July 8, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for boilers and auxiliary power plant equipment at the Naval Station, Pearl Harbor, H. T.

# LIST OF CONTRACTS PENDING

### Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file for reference only unless otherwise noted at the office of The Engineering News Publishing Co., 220 Broadway, New York.

| Bids close. | | Noted in issue of |
|---|---|---|
| 6-17 | Renewal of track, Norfolk, Va. ........(S.) | 5-25 |
| 6-17 | Paving, Washington, D. C...(S.) | 6- 8 |
| 6-17 | Steel towers, Arlington, Va.(S.) | 6- 8 |
| 6-19* | Dike, Thistle, Utah..........(S.) | 6- 8 |
| 6-19* | Irrigation system, Manteca, Cal. ........(P. & S.) | 5-25 |
| 6-22 | Dredging, Boston, Mass......(S.) | 6- 8 |
| 6-23 | Rock excavation, Boston, Mass.. ........(S.) | 6- 8 |
| 6-26* | Rock excavation, Boston, Mass. ........(S) | 6- 1 |
| 6-27 | Dredging, Mobile, Ala........(S.) | 6- 8 |
| 6-28 | Dredging, Los Angeles, Cal..(S.) | 6- 8 |
| 7- 1 | Motor trucks, Washington, W. C. ........(S) | 6-15 |
| 7- 1 | Elec. driven capstans, Hawaii. ........(S) | 6-15 |
| 7- 8 | Wharf, etc., Cuba...........(S) | 6-15 |
| 7- 8 | Power plant equip, Vallejo, Cal. ........(S) | 6-15 |
| 7- 8 | Boilers, etc., Hawaii.........(S) | 6-15 |

### Light. Heat and Power Plants.

| | | |
|---|---|---|
| 6-16 | Electric light plant, Tupelo, Miss. | 6- 8 |
| 6-16 | Heating and power plant, Fort Sheridan, Ill. | 6- 1 |
| 6-17 | Lighting system and fixtures, Helena, Mont. | 5- 4 |
| 6-19 | Conduit, wiring and gas piping system, Binghamton, N. Y. | 6- 8 |
| 6-19 | Heating system, Rutherford, N. J. | 6-15 |
| 6-19 | Generators, California, Ohio | 6-15 |
| 6-19 | Power plant, Port Orchard, Wash. | 6-15 |
| 6-20 | Fixtures and wiring, Industry, N. Y. | 6-15 |
| 6-23 | Transformers, Los Angeles, Cal. | 6-15 |
| 6-26* | Hydro-electric units, Comox, B.C. | 6- 8 |
| 6-26 | Electric plant, Prince Albert, Sask. | 6- 1 |
| 6-28 | Pumping engine, boilers, etc., Baltimore, Md. | 6-15 |
| 6-30 | Lighting fixtures, Washington, D. C. | 6-15 |
| 7- 3 | Conduit, wiring, gas piping and fixtures, Camden, Ark. | 6- 8 |
| 7- 8 | Power plant equipment, Vallejo, Cal. | 6-15 |
| 7-15 | Conduits, wiring and lighting fixtures, Philadelphia, Pa. | 6-15 |
| 1-30, | 1912 Power generating and pumping plants, Australia (Foreign). | 6-15 |

### Bridges.

| | | |
|---|---|---|
| 6-16 | Bridge, Ritzville, Wash. | 6- 1 |
| 6-16 | Bridge, Sunbury, Pa. | 6- 8 |
| 6-16 | Bridge, Cincinnati, Ohio | 6- 8 |
| 6-17 | Bridge, Mars Hill, Me. | 6- 8 |
| 6-17 | Bridge, Spain ....... (Foreign) | 4- 6 |
| 6-17 | Bridge work, Fremont, Ohio | 6-15 |
| 6-17 | Bridge, Gibson, Ill. | 6-15 |
| 6-19 | Bridges, South Bend, Ind. | 6-15 |
| 6-19 | Bridge, Galveston, Tex. | 6-15 |
| 6-20 | Bridges, Mount Carroll, Ill. | 6-15 |
| 6-20 | Bridges, Paxton, Ill. | 6-15 |
| 6-20 | Bridge work, Tallulah, La. | 5-25 |
| 6-20 | Bridge, Bluffton, Ohio | 6- 1 |
| 6-20* | Bridge, Kutztown, Pa. | 6- 1 |
| 6-20 | Bridge, Toronto, Ont. | 6- 8 |
| 6-22 | Superstructure, Brookville, Ohio. | 6- 8 |
| 6-22* | Bridge, Iowa Falls, Iowa | 6- 8 |
| 6-22 | Bridges, Lamville, Ill. | 6-15 |
| 6-23 | Bridge, Clinton, Ill. | 6-15 |
| 6-23 | Bridge work, Cincinnati, Ohio | 6- 1 |
| 6-24 | Bridges, Rockymount, Va. | 6- 8 |
| 6-26* | Bridge, Tacoma, Wash. | 6- 1 |
| 6-26 | Bridges, East Stroudsburg, Pa. | 6-15 |
| 6-28* | Substructure, Kutztown, Pa. | 6-15 |
| 6-28 | Bridge work, Cleveland, Ohio | 6- 8 |
| 7- 3 | Bridges, Orlando, Fla. | 6- 8 |
| 7- 3 | Viaduct, Houston, Tex. | 6- 1 |
| 7- 3 | Bridge, Santa Fe, N. Mex. | 5-25 |
| 7- 3 | Bridges, East Stroudsburg, Pa. | 6-15 |
| 7- 5 | Bridges, Linneus, Mo. | 6-15 |
| 7- 5 | Bridge, Eureka, Cal. | 5-25 |

### Buildings.

| Bids close. | | Noted in issue of |
|---|---|---|
| 6-15 | School, Ducktown, Tenn. | 6-15 |
| 6-15 | School, Blasdell, N. Y. | 6-15 |
| 6-16 | School, Berwyn, Ill. | 6-15 |
| 6-16 | Jail, Benton, Ark. | 6-15 |
| 6-17 | Factories, etc., Highland Park, Mich. ........(Mfg. Pl.) | 6-15 |
| 6-19 | Buildings, Columbus, Ohio | 6- 1 |
| 6-19 | Schools, New York, N. Y. | 6- 8 |
| 6-20 | Market house, Toledo, Ohio | 6- 8 |
| 6-20* | Hospital bldg., Washington, D. C. | 6- 8 |
| 6-20 | School, Welland, Ont. | 6-15 |
| 6-20 | School, Stendal, Ind. | 6-15 |
| 6-20 | Central bldg., Toronto, Ont. | 6-15 |
| 6-20 | Hospital, Canton, S. Dak. | 6-15 |
| 6-22 | Brick school, Wolsey, S. Dak. | 6-15 |
| 6-22 | U. S. post-office, La Grande, Ore. | 5-25 |
| 6-23 | School, Garrison, Iowa | 6- 8 |
| 6-24 | Remodeling bldg., Lansing, Mich. | 6- 8 |
| 6-26 | Village hall, Maumee, Ohio | 6- 8 |
| 6-26 | Court house, Springfield, Mo. | 6-15 |
| 6-26 | Schools, etc., New York | 6-15 |
| 6-26 | Bakery, Fort Howard, Md. (Mfg. Pl.) | 6-15 |
| 6-27 | Hospital, Mayville, N. Dak. | 6-15 |
| 6-27 | U. S. post-office, Gettysburg, Pa. | 5-25 |
| 6-27* | Firemen's quarters, Fort Terry, N. Y. | 6- 8 |
| 6-28 | U. S. post-office, Suffolk, Va. | 6- 1 |
| 7- 1 | Plant, Detroit, Mich. (Mfg. Pl.). | 6- 1 |
| 7- 1 | Schools, Miami, Okla. | 6-15 |
| 7- 1 | School, South Bend, Ind. | 6-15 |
| 7- 3 | School, Cincinnati, Ohio | 6-15 |
| 7- 3 | School, Chillicothe, Ohio | 6-15 |
| 7- 5* | City building, Gillespie, Ill. | 6-15 |
| 7- 5 | U. S. post-office, Wash., D. C. | 6- 1 |
| 7- 6* | Supt's dwelling, Thiells, N. Y. | 6- 8 |
| 7-10 | U. S. post-office, Ellsworth, Me. | 6- 8 |
| 7-10 | School, Albany, N. Y. | 6-15 |
| 7-11 | Railway shops, Winnipeg, Man. | 5-15 |
| 7-11* | Dormitory, Sonyea, N. Y. | 6- 8 |
| 7-12 | U. S. post-office, Milford, Mass. | 6- 8 |
| 7-12 | Schools, Topeka, Kan. | 6-15 |
| 7-15* | U. S. post-office, Cordele, Ga. | 6- 8 |
| 7-17 | U. S. post-office, Ironton, Ohio | 6-15 |
| 7-20 | U. S. post-office, Waterville, Me. | 6-15 |
| 7-27 | Court house, Sidney, Neb. | 6-15 |
| 7-27* | Group of buildings, Olympia, Wash. | 5-11 |

### Water-Works.

| | | |
|---|---|---|
| 6-15 | Boilers, Dallas, Tex. | 6-15 |
| 6-16 | Water supply, Rahway, N. J. | 6-15 |
| 6-16 | Watermain extension, Colorado Springs, Colo. | 6- 8 |
| 6-17 | Steel towers, Arlington, Va. | 6- 8 |
| 6-17* | Pipe, valves, etc., Evansville, Ind. | 5-25 |
| 6-17 | Well, Morrison, Ill. | 6-15 |
| 6-17 | Well, Crawfordsville, Ind. | 6-15 |
| 6-19 | Valves, etc., Ada, Okla. | 6-15 |
| 6-19 | Water-works, Battleford, Sask. | 6-15 |
| 6-19 | Water extensions, Moose Jaw, Sask. | 6-15 |
| 6-19* | Irrigation system, Manteca, Cal. | 5-25 |
| 6-19* | Dike, Thistle, Utah | 5-18 |
| 6-19 | Penstock, Seattle, Wash. | 6- 1 |
| 6-19 | Purification plant, etc., Cherryvale, Kan. | 6- 8 |
| 6-20* | Laying pipe, Toronto, Ont. | 6- 1 |
| 6-20 | Cistern, Chico, Cal. | 6-15 |
| 6-20 | Pipe pump plant, etc., La Plata, Md. | 6-15 |
| 6-20 | Water meters, Washington, D. C. | 6-15 |
| 6-21 | W.-wks impvts., Emporia, Kan. | 6-15 |
| 6-21 | Wells, etc., New York, N. Y. | 6- 8 |
| 6-21 | Pump-house, reservoir, etc., Fort Ethan Allen, Vt. | 6- 8 |
| 6-21 | Watermains, Gadsden, Ala. | 6- 8 |
| 6-21* | Water pipe, Hammond, Ind. | 6- 8 |
| 6-22 | Water-works, Crosswick, N. J. | 6-15 |
| 6-22 | Pump, Galveston, Tex. | 6-15 |
| 6-23 | Water pipe, Boston, Mass. | 6-15 |
| 6-23 | Distribution system, Mena, Ark. | 6- 8 |
| 6-24 | Pump, etc., N. Mankato, Minn. | 6- 1 |
| 6-26 | Watermain, Euclid, Ohio | 6- 8 |
| 6-26 | Irrigation work, Turlock, Cal. | 6-15 |
| 6-26* | Canals, etc., Grand Valley, Colo. | 6-15 |
| 6-26* | Water main, Newburg, N. Y. | 6-15 |
| 6-27 | Standpipe, Imlay City, Mich. | 6-15 |
| 6-27 | Pumping station, etc., Bridgeton, N. J. | 6- 8 |
| 6-27* | Watermain, Frankfort, Ky. | 6- 8 |
| 6-27* | Water intake, etc., Muskogee, Okla. | 6- 8 |
| 6-27 | Water-works, Red Springs, N. C. | 6- 1 |
| 6-28* | Pumping engine, Baltimore, Md. | 6-15 |
| 6-29* | Water-works, Mandan, N. Dak. | 6-15 |
| 6-29* | Pumping machinery, etc., Montreal, Que. | 5-25 |
| 6-30 | Filter equip., etc., Minneapolis, Minn. | 6- 1 |
| 7- 1 | Franchise, England, Ark. | 6- 8 |
| 7- 3 | Roof on reservoir, Mendota, Ill. | 6-15 |
| 7- 5 | Watermain, Cleveland, Ohio | 6- 8 |
| 7- 6 | Pipe, standpipe, etc., Milton, Del. | 6-15 |
| 7- 7 | W.-wks. extension, Columbus, Neb. | 6-15 |
| 7-10 | Water lines, High Point, N. C. | 6-15 |
| 7-13* | Filters, Montreal, Que. | 6-15 |

### Sewers.

| Bids close. | | Noted in issue of |
|---|---|---|
| 6-15 | Sewers, Bucyrus, Ohio | 6-15 |
| 6-16 | Sewers, Piqua, Ohio | 6-15 |
| 6-16 | Sewer, Niles, Ohio | 6-15 |
| 6-16 | Sewer, Akron, Ohio | 6-15 |
| 6-16 | Sewer, Elizabeth, N. J. | 6-15 |
| 6-16 | Sewers, St. Louis, Mo. | 6- 8 |
| 6-17 | Sewer, Oakland, Cal. | 6-15 |
| 6-19 | Sewers, Council Bluffs, Iowa | 6-15 |
| 6-19 | Sewers, Moose Jaw, Sask. | 6-15 |
| 6-19 | Sewers, New York, N. Y. | 6- 8 |
| 6-19 | Sewer, Brainerd, Minn. | 6- 1 |
| 6-20 | Sewer system, Toccoa, Ga. | 6- 1 |
| 6-20 | Sewers, Madison, S. Dak. | 5-18 |
| 6-20 | Sewers, Detroit, Mich. | 6-15 |
| 6-20 | Sewer, Michigan City, Ind. | 6-15 |
| 6-21 | Sewers, New York, N. Y. | 6-15 |
| 6-21 | Sewers, Hutchinson, Minn. | 6-15 |
| 6-21* | Pipe, manholes, Attleboro, Mass. | 6- 8 |
| 6-22 | Sewer, Anoka, Minn. | 6-15 |
| 6-22 | Sewers, Wausau, Wis. | 6-15 |
| 6-25 | Sewers, South Norwalk, Conn. | 6-15 |
| 6-26 | Sewer, Nevada, Iowa | 6-15 |
| 6-26 | Sewers, Aberdeen, S. Dak. | 6-15 |
| 6-26 | Sewers, New York | 6-15 |
| 6-27* | Sewer, Hempstead, N. Y. | 6-15 |
| 6-27 | Sewerage system, Red Springs, N. C. | 6- 8 |
| 6-27* | Sewer, Woonsocket, R. I. | 6-15 |
| 6-28* | Sewer, Baltimore, Md. | 6- 8 |
| 6-30 | Sewer, Appleton, Wis. | 6-15 |
| 6-30 | Sewers, Bucyrus, Ohio | 6-15 |
| 7- 3 | Sewage disposal system, San Jose, Cal. | 2-23 |
| 7- 6* | Sewer system, Madison, S. Dak. | 6- 8 |

### Streets and Roads.

| | | |
|---|---|---|
| 6-15 | Paving, etc., Montreal, Que. | 6-15 |
| 6-16 | Paving, etc., Derry, Pa. | 6-15 |
| 6-16 | Paving, Akron, Ohio | 6-15 |
| 6-16 | Road work, Cincinnati, Ohio | 6- 1 |
| 6-16* | Paving, Holyoke, Mass. | 6- 1 |
| 6-16 | Paving Troy, N. Y. | 6- 8 |
| 6-16 | Paving, etc., Toledo, Ohio | 6- 8 |
| 6-16 | Macadamizing, Bluefield, W. Va. | 6- 8 |
| 6-16 | Paving, Springfield, Mass. | 6- 8 |
| 6-17 | Macadam road, Pocatello, Idaho. | 6- 1 |
| 6-17 | Paving, Washington, D. C. | 6- 1 |
| 6-17 | Pike, Paris, Ky. | 6-15 |
| 6-17 | Paving, etc., Hamler, Ohio | 6-15 |
| 6-17 | Paving, Canfield, Ohio | 6-15 |
| 6-19 | Paving, Boston, Mass. | 6-15 |
| 6-19 | Paving, Newburgh, N. Y. | 6-15 |
| 6-19 | Sidewalks, Syracuse, N. Y. | 6-15 |
| 6-19 | Sidewalks, Toledo, Ohio | 6-15 |
| 6-19 | Paving, etc., Youngstown, Ohio | 6-15 |
| 6-19 | Paving, Jasonville, Ind. | 6-15 |
| 6-19 | Paving, etc., Galveston, Tex. | 6-15 |
| 6-19 | Paving, Albert Lea, Minn. | 6-15 |
| 6-19 | Roads, Anderson, Ind. | 6- 8 |
| 6-19 | Road, Hoquiam, Wash. | 6- 8 |
| 6-19 | Paving, Newnan, Ga. | 6- 8 |
| 6-19 | Sidewalks, Wharton, Tex. | 6- 8 |
| 6-20 | Paving, Newton, Kan. | 6- 8 |
| 6-20 | Highways, New Orleans, La. | 6- 8 |
| 6-20* | Paving, etc., Auburn, N. Y. | 6- 8 |
| 6-20 | Macadamizing, etc., Springfield, Tenn. | 6- 1 |
| 6-20 | Paving, Boston, Mass. | 6-15 |
| 6-20 | Repaving, Painesville, Ohio | 6-15 |
| 6-20* | Paving, Belmar, N. J. | 6-15 |
| 6-21 | Paving, etc., New York, N. Y. | 6-15 |
| 6-21 | Repaving, etc., New York, N. Y. | 6-15 |
| 6-21 | Paving, etc., Baltimore, Md. | 6-15 |
| 6-21 | Paving, Jacksonville, Fla. | 6-15 |
| 6-21 | Road impvt., Columbus, Ohio | 6- 1 |
| 6-22 | Paving, etc., New York, N. Y. | 6-15 |
| 6-22* | Road repair, Wilkes-Barre, Pa. | 6-15 |
| 6-23 | Walks, Rocky River, Ohio | 6-15 |
| 6-23 | Paving, etc., Youngstown, Ohio | 6-15 |
| 6-23* | Paving, Washington, D. C. | 6- 8 |
| 6-23 | Road repair, Cincinnati, Ohio | 6- 8 |
| 6-24 | Paving, etc., Bowling Green, Ohio | 6-15 |
| 6-24 | Paving, etc., Kingston, Ont. | 6-15 |
| 6-26 | Paving, Holyoke, Mass. | 6-15 |
| 6-26* | Paving, Plainfield, N. J. | 6- 8 |
| 6-26* | Paving, Maquoketa, Iowa | 6-15 |
| 6-27 | Paving, Lorain, Ohio | 6-15 |
| 6-27* | Street improvement, Havre de Grace, Md. | 6-15 |
| 6-28 | Grading, Richmond, Va. | 6-15 |
| 6-28 | Highway, Sacramento, Cal. | 6-15 |
| 6-28 | Road treatment, Columbus, Ohio. | 6- 8 |
| 6-30 | Road treatment, Cincinnati, Ohio. | 6- 8 |
| 7- 3 | Paving, Parkersburg, W. Va. | 6-15 |
| 7- 3* | Paving, etc., Westfield, N. J. | 6-15 |
| 7- 5* | Paving, Olean, N. Y. | 6-15 |
| 7- 6* | Paving, Olean, N. Y. | 6-15 |
| 7- 7 | Road repair, Cincinnati, Ohio | 6-15 |
| 7-11 | Paving, etc., Greenfield, Iowa | 6-15 |
| 7-15* | Paving, etc., Wilmington, N. C. | 6-15 |

### Miscellaneous.

| Bids close. | | Noted in issue of |
|---|---|---|
| 6-15 | Ditches, Crowley, La. | 6-15 |
| 6-16 | Incinerator (Garbage), Winnipeg, Man. | 6-15 |
| 6-16 | Repairs for fire houses, Mount Vernon, N. Y. | 6-15 |
| 6-16* | Dredging, Savannah, Ga. | 5-18 |
| 6-17* | Dredging, Portland, Me. | 5-25 |
| 6-17 | Renewal of track, Norfolk, Va. | 5-25 |
| 6-17 | Seawall, Norfolk, Va. | 6- 1 |
| 6-17 | Cable, Washington, D. C. | 6- 8 |
| 6-19* | Canal, St. Paul, Minn. | 5-25 |
| 6-19 | Sand filling, Galveston, Tex. | 6-15 |
| 6-19 | Lumber, New York | 6-15 |
| 6-20 | Hose wagons, New York | 6-15 |
| 6-20* | Dredging, Newport, R. I. | 5-25 |
| 6-20 | Hose, Washington, D. C. | 5-11 |
| 6-20 | Colliers and tugs, Wash., D. C. | 4-27 |
| 6-20* | Coal, New York | 6- 1 |
| 6-20 | Refuse destructor work, New York (Garbage) | 6- 8 |
| 6-21 | Ditches, Madison, Wis. | 6- 8 |
| 6-21 | Garbage disposal, Indianapolis, Ind. | 6- 8 |
| 6-21 | Paving pitch, cement, etc., New York | 6-15 |
| 6-21 | Roofing work, New York | 6-15 |
| 6-21 | Fencing, New York | 6-15 |
| 6-21 | Repairs to fire boat, fire quarters, New York | 6-15 |
| 6-21 | Drainage, Butler, Mo. | 6-15 |
| 6-22 | Improving playground, New York | 6-15 |
| 6-22 | Improving playground, New York | 6-15 |
| 6-22 | Ditches, Anoka, Minn. | 6-15 |
| 6-22 | Cranes, etc., Panama. ........(U. S. Poss.) | 6-15 |
| 6-22 | Cranes, etc., Panama (U. S. Poss.) | 6- 8 |
| 6-22 | Aquarium, Boston, Mass. | 6- 8 |
| 6-22* | Dredging, Boston, Mass. | 5-25 |
| 6-23* | Towboats, Cincinnati, Ohio | 5-25 |
| 6-23 | Rock excavation, Boston, Mass. | 6- 1 |
| 6-23 | Ditch, Jackson, Minn. | 6-15 |
| 6-24 | Dredging, Philadelphia, Pa. | 6- 1 |
| 6-26 | Dredging, Baltimore, Md. | 6- 1 |
| 6-26* | Dredging, Jacksonville, Fla. | 6- 1 |
| 6-26 | Storage and locker building, New York | 6-15 |
| 6-26* | Rock excavation, Boston, Mass. | 6- 1 |
| 6-26* | Ledge excav., dredging, Portland, Me. | 6- 1 |
| 6-26 | Breakwaters, etc., Cleveland, Ohio | 5-25 |
| 6-26* | Dredging, Baltimore, Md. | 5-25 |
| 6-27* | Dredging, Mobile, Ala. | 6- 8 |
| 6-28 | Dredging, Los Angeles, Cal. | 6- 8 |
| 6-28 | Wall, Anniston, Ala. | 6- 8 |
| 6-29 | Stone, etc., Vicksburg, Miss. | 6- 8 |
| 6-29 | Dredging, dike removal, Wilmington, Del. | 6- 8 |
| 6-29* | Lock masonry, Detroit, Mich. | 5-11 |
| 6-29 | Levee construction, Marion, Ark. | 6-15 |
| 6-29 | Grandstand, Sacramento, Cal. | 6-15 |
| 6-30 | Railway, Panama......(Foreign) | 6-15 |
| 6-30 | Subway, Fort William, Ont. | 6- 8 |
| 6-30* | Dredging, Wilmington, N. C. | 6- 8 |
| 7- 1 | Railway, Ontario (Railways) | 6- 8 |
| 7- 1 | Ditch, Lebanon, Ind. | 6-15 |
| 7- 1 | Motor trucks, Washington, D. C. | 6-15 |
| 7- 1 | Brush, etc., Memphis, Tenn. | 6-15 |
| 7- 1 | Elec. driven capstans, Hawaii ........(U. S. Poss.) | 6-15 |
| 7- 3* | Revetment, Kansas City, Mo. | 6- 8 |
| 7- 3 | Police patrol telegraph system, Winnipeg, Man. | 5-11 |
| 7- 4 | Steel rails, etc., Australia ........(Foreign) | 6-15 |
| 7- 5 | Breakwater, Port Arthur, Ont. | 6-15 |
| 7- 5* | Jetty work, Dallas, Tex. | 6- 8 |
| 7- 5* | Dredging, Savannah, Ga. | 6- 8 |
| 7- 6* | Dredging, Montgomery, Ala. | 6- 8 |
| 7- 6 | Barn and ice house, Theills, N. Y | 6-15 |
| 7- 7* | Dredging, New London, Conn. | 6- 8 |
| 7- 8* | Dredging, Galveston, Tex. | 6-15 |
| 7- 8 | Wharf, etc., Cuba..(U. S. Poss.) | 6-15 |
| 7- 8 | Boilers, etc., Hawaii.(U. S. Poss.) | 6-15 |
| 7-11 | Switchboard cable, Australia ........(Foreign) | 6-15 |
| 7-11* | Dredging, Newport, R. I. | 6-15 |
| 7-12* | Stone, Savannah, Ga. | 6-15 |
| 7-15* | Iron and steel, Dallas, Tex. | 6-15 |
| 7-15 | Station building, Charleston, S.C. | 6- 1 |
| 7-17* | Dredging, Portland, Me. | 6-15 |
| 7-18 | Steel rails, Panama.(U. S. Poss.) | 6-15 |
| 7-22* | Harbor work, Chile (Foreign) | 4-27 |
| 7-24 | Spillway gates and caissons, Panama.......(U. S. Poss.) | 6-15 |
| 8- 1 | Steamers, Argentine....(Foreign) | 6-15 |
| 8- 1 | Railway, Ontario (Rys.) | 6- 8 |
| 8- 7 | Torpedo-boat destroyers, Washington, D. C. | 6- 8 |

### Examinations.

| Examination date. | | Noted in issue of |
|---|---|---|
| 6-19 | Mechanical Engineer, New York | 5-11 |
| 6-21 | Bacteriological Chemist, Wash., D. C. | 5-18 |
| 6-21 | Apprentice Draftsman, Washington, D. C. | 5-25 |
| 6-22 | Chemist, New York, N. Y. | 5-25 |
| 6-26 | Marine Engr., New York | 6- 1 |
| 6-29 | Cable Tester, New York | 6- 1 |
| 6-30 | Inspector of Iron and Steel construction, New York | 6- 1 |
| 7- 8 | Elec. Engineer, Albany, N. Y. | 6-15 |
| 7-17 | Junior Mechan. Draftsman, New York | 6-15 |
| 7-19 | Mechanical Draftsman, Washington, D. C. | 6-15 |
| 7-19 | Topographical Draftsman, New York | 6- 15 |
| 7-20 | Mechanical Engineer, New York | 6-15 |

+PIPE LINE, ETC.—Hawaii.—The contract for constructing a pipe line and laying pipe in tunnel at Fort Ruger, has been awarded, it is reported, to the HONOLULU CONSTRUCTION & DRAYING CO., of Honolulu, H. T., at $20,707.

CAPSTANS.—Hawaii.—Bids will be received until 11 a. m., July 1, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for 16 electrically-driven capstans, complete, seven at the navy yard, New York, and nine at the Naval Station, Pearl Harbor, H. T.

WHARF, ETC.—Cuba.—Bids will be received until July 8 by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for timber wharf, brush bulkhead, dredging and filling at the U. S. Naval Station, Guantanamo, per Specification No. 1798. Estimated cost, wharf, $40,000; bulkhead construction and dredging, $32,000. R. C. Hollyday is Ch. of Bureau.

CRANES, ETC.—Panama.—Bids will be received by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., until 10.30 a. m., June 22, for furnishing cargo-handling and locomotive cranes, gasoline engine-driven passenger car, rock skips, chaplets, electric cable and cable terminals under Circular 634. Information relating to this circular may be obtained at Washington, or at the offices of the Assistant Purchasing Agents, 24 State St., New York; 55 National Realty Bldg., New Orleans; 1086 North Point St., San Francisco; also from U. S. Engineer Offices in Seattle, Los Angeles, Baltimore, Philadelphia, Pittsburg, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma.

STEEL AND CASTINGS.—Hawaii.—Bids were received as follows on June 3 by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for steel and castings for seven buildings at the Naval Station, Pearl Harbor, H. T.: United States Steel Products Co., 30 Church St., New York, Item (1) $133,315 (2) 2.65 cts.; Penn Bridge Co., 312 Bond Bldg., Washington, Item (1) $155,789, (2) 2.95 cts.; J. B. Kendall Co., 485 Missouri Ave., N. W., Washington, Item (1) $137,950, (2) 2.77 cts.; Independent Bridge Co., 829 Beaver Ave., Northside, Pitsburg, Pa., Item (1) $179,139, (2) 3.6 cts.; Western Gas Construction Co., Buchanan and Reed Sts., Fort Wayne, Ind., Item (1) $189,756, (2) 3.855 cts.; Morris Wheeler & Co., 1608 Market St., Philadelphia, Pa., Item (1) $139,750, (2) 3 cts.; Hamilton & Chambers, 29 Broadway, New York, Item (1) $145,600, (2) 3 cts., material added, 2¾ cts. deducted; Lehigh Valley Structural Steel Co., Allentown, Pa., Item (1) $156,824, (2) 3 cts.; Pennsylvania Steel Co., Steelton, Pa., Item (1) $154,350, (2) 3 cts.; Minneapolis Steel & Machinery Co., Minneapolis, Minn., Item (1) $162,974; McClintic-Marshall Construction Co., Park Bldg., Pittsburg, Pa., Item (1) $142,600, (2) 2.20 cts.

SPILLWAY GATES AND CAISSONS.—Panama.—Bids will be received until 10.30 a. m., July 24, by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for furnishing and erecting spillway gates and caissons, and to furnish footbridges for spillways, rising stem gate valves, lower guard gate valves, lateral culvert valves, bulkhead gates, and screens for the lock culverts, castings, etc., to form the gate seats in spillways; roller trains and sealing devices for the rising stem gate valves for the locks; roller trains and sealing devices, rocker bearings, and gate rollers for Stoney Gates at spillways, and railings for spillways. Blanks and general information relating to this Circular No. 636 may be obtained at Washington or at the offices of the Assistant Purchasing Agents, 24 State St., New York; 614 Whitney-Central Bldg., New Orleans, La., and 1086 North Point St., San Francisco, Cal.; also from the U. S. Engineer Offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Md.; Philadelphia, Pa.; Pittsburg, Pa.; Boston, Mass.; Buffalo, N. Y.; Cleveland, Ohio; Cincinnati, Ohio; Chicago, Ill.; St. Louis, Mo.; Detroit, Mich.; Milwaukee, Wis.; St. Paul, Minn.; Chattanooga, Tenn.; Louisville, Ky.; Mobile, Ala., and Galveston, Tex.; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.

LUMBER.—Panama.—Bids were received as follows on May 31 by Capt F. C. Boggs, Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for furnishing lumber under Circular 631, (a) 829,133 ft., B. M., lumber, (b) 1,200,000 ft. B. M., lumber, (c) 5,000 85-ft. piles, creosoted: Balfour, Guthrie Co., Seattle, Wash., (a) $16,607, (b) $24,036; J. H. Burton & Co., Inc., 45 Broadway, New York, (c) $24,300; Chicago Lumber & Coal Co., St. Louis, Mo., (a) $17,729, (b) $26,700; Cooney, Eckstein & Co., Inc., 66 Broad St., New York, (a) (b) $21.90 per M.; G. Elias & Bro., Buffalo, N. Y., (a) $18,707, (b) $31,200; William D. Gill & Sons, Baltimore, (a) $23,274, (b) $35,700; D. L. Gillespie & Co., Pittsburg, (a) $20,384, (b) $30,300; Gress Mfg. Co., 18 Broadway, New York, (a) $19,391, (b) $26,400; Gulfport Creosoting Co., Gulfport, Miss., (c) $30,132; Hammond Lumber Co., San Francisco, (a) $16,812, (b) $25,800; J. K. Joice, Chicago, (a) and (b) $47,880, (c) $38,250; S. E. Naylor & Co., Gulfport, Miss., (c) $19,117; Charles Nelson Co., 16 California St., San Francisco, (a) $19,222, (b) $28,140; Southern Creosoting Co., Slidell, La., (c) $31,875; Ensign Lumber Co., Jacksonville, Fla., (a) $15,938, (b) $28,500, (c) $24,225; Robinson Lumber, Veneer & Box Co., Ltd., New Orleans, (a) $19,800, (c) $32,725; W. R. Grace & Co., San Francisco, (a) $16,251, (b) $23,520, (c) $32,081. Contracts have been awarded as follows: (a) and (b) to W. R. GRACE & CO., San Francisco, and (c) to ENSIGN LUMBER CO., Jacksonville, Fla.

## FOREIGN CONTRACTS.

(To insure prompt attention, letters on consular business should be addressed to The American Consul at ———, ———. Such letters are opened and attended to by whoever may be in charge of the office. If addressed to the consul, personally, letters are forwarded to him, unopened, should he be absent, and a delay thus intervenes. If, in the meantime, he should have gone out of office, the matter may wholly escape attention.)

RAILWAY.—Panama.—Bids will be received by the Secretary of the Public Works Department, it is reported, until June 30 for the construction of the Panama-David railway.

STEEL RAILS, ETC.—Australia.—Bids will be received by the Supply and Tender Board, Adelaide, until 3 p. m., July 4, for supplying and delivering 6,385 tons of steel rails and 336 tons of steel fishplates.

STEAMERS.—Argentine.—Bids will be received by the Direccion General de Obras Hidraulicas, Ministerio de Obras Publicas, Buenos Aires, until Aug. 1 for two cargo steamers.

+SUBMARINES.—Chile.—The Chilian Government has awarded to the ELECTRIC BOAT CO., New York, a contract for building two submarine boats costing in the aggregate about $1,000,000. They will be built at Seattle, Wash.

TELEPHONE AND TELEGRAPH MATERIAL.—Australia.—Bids will be received by the Deputy Postmaster General, Melbourne, until 3 p. m., June 27, for 1,000 jointing sleeves, 254 tons of galvanized iron wire, and ten tons of steel strand wire; also until 3 p. m., July 11, for 12½ miles of switchboard cable.

HARBOR IMPROVEMENT.—Italy.—The Commission which has been considering harbor improvements in the Adriatic has submitted its report, it is stated. The most important works contemplated are those at the ports of Bari, Ortona, Ancona, Ravenna, Chioggia and Venice. Breakwaters, dredging, and the construction of piers and docks are included in the project.

POWER GENERATING AND PUMPING PLANTS.—Australia.—Bids will be received until noon, Jan. 30, 1912, by the Metropolitan Water and Sewerage Board, Brisbane, Queensland, Australia, for designs, specifications, supply, erection, setting to work, twelve months' maintenance, including four weeks' efficiency trial and six months' working trial at the Mount Crosby Pumping Station, on the Brisbane River, for alternatively one, two and three complete units, consisting of power generating plant or plants and pump or pumps of ample power and capacity to raise from the suction wells through the delivery mains through a total vertical lift of 400 ft., exclusive of the head due to friction, etc., not less than 6,000,000 British imperial gallons of a volume, each gallon, of 277.463 cu. ins. per unit plant per day of 24 hours. All communications and bids must be in English. For further particulars, address George Johnston, Secy. Bd., Brisbane.

## EXAMINATIONS.

MECHANICAL ENGINEER.—New York, N. Y.—The Municipal Civil Service Commission, New York, announces an examination on July 20, at 10 a. m. Applications will be received from June 13 to June 27 at 4 p. m. Salary $2,550. F. A. Spencer, is Secy.

JUNIOR MECHANICAL DRAFTSMAN.—New York, N. Y.—The Municipal Civil Service Commission, 299 Broadway, New York, will receive applications until 4 p. m., June 22, for the position of Junior Mechanical Draftsman. The examination will be held on July 17, at 10 a. m. The subjects and weights of the examination are as follows: Technical, 5; experience, 2; mathematics, 2; neatness, 1; 75% will be required on technical paper and 70% on all. Minimum age, 18 years. Salary, $900 a year. No vacancies at present. Frank A. Spencer is Secy.

ELECTRICAL ENGINEER.—Albany, N. Y.—Applications for position of Electrical Engineer, examination on July 8, will be received by the State Civil Service Commission until June 30. The duties of the position include the preparation of plans and specifications for the installation of electric wiring and fixtures in both new and old buildings, and for the installation of central electric generating plants and feeder systems. Candidates who are graduates of duly established schools of technology must have three years' experience in practical work. Other candidates must have had five years' experience. Subjects of examination and relative weights: Practical and technical questions relating to the duties of the position as outlined above, 5; experience and education, 5. Salary, $1,800 to $2,100.

TOPOGRAPHICAL DRAFTSMAN.—New York, N. Y.—The Municipal Civil Service Commission, 299 Broadway, New York, announces an examination on July 19 at 10 a. m., for the position of Topographical Draftsman. Applications will be received from June 13 (at 4 p. m.), to June 27. Salary, $1,200 per annum and upwards. F. A. Spencer is Secy.

MECHANICAL DRAFTSMAN.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on July 19-20, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Mechanical Draftsman, Ordnance Bureau, War Department, at entrance salaries ranging from $900 to $1,200 a year, and vacancies requiring similar qualifications, unless it shall be decided in the interest of the service to fill such vacancies by reinstatement, transfer, or promotion. Men only will be admitted to this examination. The examination will consist of the subjects mentioned below, weighted as indicated: Machine design (including arithmetic, algebra to quadratics, geometry, mensuration, logarithms, use of tables, elementary problems in mechanics, use of slide rule, materials used in machine construction, and practical calculations involving the interpretation of formulas and the correct working out of results in special cases), 30 points; Drafting (involving competent knowledge of machine construction and the ability to draw neatly to scale), 35 points; Training, experience and fitness, 35 points. Applicants must have reached their 18th birthday. Examination form 1312.

---

**For other Proposal Advertisements see pages**

**65, 66, 68, 70, 72**

**of Advertisements and Construction News, page 292**

---

## PAVING, ETC.

Wilmington, N. C.

Sealed proposals for grading, paving and curbing Front Street, in the City of Wilmington, N. C., will be received at the Mayors Office at the City Hall in Wilmington, N. C., until 12 o'clock M. on the 15th July A. D. 1911. At that time they will be opened and publicly read before the City Council.

All proposals must be addressed to P. Q. Moore, Councilman in charge of Streets and Wharves. Each proposal to consist approximately of 24,000 sq. yds. pavement, ——— lineal ft. of concrete curb, 6,000 lineal ft. of granite curb, ——— lineal ft. of combined curb and gutter.

Each proposal must be accompanied with a certified check in the sum of 5% of the contract price, made payable to the Mayor of the City of Wilmington, N. C.

Specifications and blank forms of proposals can be obtained by application to P. Q. Moore, Councilman in charge of Streets and Wharves, marked "Proposals for Paving Front Street," and a full set of plans can be seen at the Office of the City Engineer of the City of Wilmington. The right is reserved to reject any and all bids.

The City Council will consider any class of pavement other than those named in the proposal sheets, and any bidder is invited to submit a supplementary proposal and set of specifications for any other class of paving he may advocate. His specifications must conform to the General Specifications, except the depth may be varied of the concrete foundations and the special work adjacent to the railroad track may be differently specified.

P. Q. MOORE,
Councilman, Dept. of Streets & Wharves.

---

READVERTISEMENT.

## WATER-WORKS.

Crosswicks, N. J.

Proposals will be received by the Crosswicks Water Company, Crosswicks, N. J., until seven-thirty o'clock P. M., Thursday, June 22d, 1911, for the complete construction of a Water Works, including piping, pumping station with equipment, standpipe or tower, collecting system and all machinery and accessories.

The right to reject any or all bids is reserved.

All bids shall be addressed to George B. Thorn, Secretary, Crosswicks, N. J., and be accompanied by a certified check for five hundred dollars ($500) payable to the order of the Secretary.

Copies of the Plans, Contract and Specifications with bidding sheet may be obtained, upon a deposit of five dollars ($5.00), at the office of the Secretary and at the following offices of the Engineer, 46 Park St., Bordentown, N. J., and 220 Broadway, New York City.

One dollar ($1.00) will be charged for loan of specifications.

GEORGE B. THORN,
W. W. YOUNG, Secretary.
Engineer.

---

## PAVING.

Maquoketa, Iowa.

The City will receive bids for Brick Block, Creosote Block, Sarcolithic Mineral Rubber, and Asphaltic Concrete Paving, until noon, June 26th, 1911.

Plans and specifications on file with
E. J. KULLMER, City Clerk.

---

U. S. ENGINEER OFFICE, 537 Congress Street, Portland, Maine, June 14, 1911.—Sealed proposals for dredging in Saco River, Maine, will be received at this office until 12 M., July 17, 1911, and then publicly opened. Information on application. W. E. CRAIGHILL, Lieut.-Col., Engrs.

---

## SUBSTRUCTURE OF KUTZTOW BRIDGE, NO. 1.

COUNTY CONTROLLER'S OFFICE.
Reading, Pa., June 7, 1911.

Sealed proposals will be received at this office up to 10 o'clock A. M., Wednesday, June 28, 1911, for the erection of the substructure of the Kutztown Bridge, No. 1. Plans and specifications can be had at the County Commissioners' Office, at Reading, Pa. A deposit of five dollars must be made for each set of plans taken out, which will be refunded when the same are returned.

All bids must be accompanied with a certified check equal to 10 per cent. of the aggregate amount of the bid. The right is reserved to reject any or all bids.

A. L. RHOADS,
County Controller.

---

## SEWER.

Woonsocket, R. I.

Sealed proposals will be received by the Board of Sewer Commissioners, City Hall, Main Street, Woonsocket, R. I., until 4 o'clock P. M., Tuesday, June 27th, 1911, for the following work:

(a) About 900 feet of 8-inch sanitary sewer and appurtenances.

(b) About 500 feet of surface water drain.

Each proposal must be accompanied by a certified check for the sum of five hundred ($500) dollars, made payable to the order of the City Treasurer of the City of Woonsocket, R. I., as surety that if the proposal is accepted a contract will be entered into.

Plans and specifications may be seen and blank form of contract and proposal obtained at the office of the City Engineer, City Hall, Main Street, Woonsocket, R. I.

The right is reserved to reject any and all bids, as the interests of the city may appear.

FRANK E. HOLDEN,
GEORGE H. VALOIS,
JOHN C. COSSEBOOM,
Board of Sewer Commissioners.
FRANK H. MILLS, City Engineer.

---

## WATER MAIN.

Newburgh, N. Y., June 12, 1911.

Sealed proposals will be received by the Board of Water Commissioners at their office in Lander Street in said City, until 5 o'clock P. M. June 26th, 1911, for the completion of the contract for laying a 30-inch water main, together with work incidental thereto. There is about 1,000 feet of pipe to be laid, air valve chambers to be built, etc.

Plans and specifications can be seen and blank forms of proposal obtained at office of City Engineer, City Hall, or at the office of the Board of Water Commissioners.

A certified check or cash to the amount of $500.00 must accompany each proposal.

The Board of Water Commissioners reserves the right to reject any or all bids.

WM. W. HAWKS,
Pres. Bd. of Water Commissioners.
CURTIS STANTON,
Supt. of Water Works.

---

## DREDGING.

New York, N. Y.

A contractor having a large hydraulic dredging contract on hand wishes to sublet portion of the work. Address "D. B. 24," Engineering News, New York.

## Miscellaneous Wants

WANTED—A large hydraulic dredging plant. Address "E. B. 24," Engineering News, New York. 21-1t

## Situations Open

(Or Vacant)

WANTED—Several beam detailers and plan men on structural steel, for buildings; none except experienced men need apply. JOHN V. B. RAPP, 507 5th Ave., New York. 21-1t

---

WANTED—Draftsman, with some experience in design of light steel mill buildings and capable of laying out work for draftsman; good chance for proper party; must be able to report quickly; state minimum salary and give reference. ROANOKE BRIDGE CO., Roanoke, Va. 14-1t